

EPA REGISTRATION NUMBER 66330-59 – VOL. 3



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Rodney Akers
Arysta LifeScience North America
15401 Weston Parkway, Suite 150
Cary, NC 27513

JUL 6 2010

Subject: Midas 33:67
EPA Reg. No. 66330-59
Your label amendment dated June 8, 2010

Dear Dr. Akers:

In the Agency letter of June 8, 2010, the Agency approved amended labeling for this registration with the condition that specific label revisions be made to the June 8, 2010 label stamped "Accepted with Comments". This letter further amends the June 8, 2010 label stamped "Accepted with Comments" by requiring the following additional changes:

Midas 33:67 label for sale and use in Florida only

- On page 19 under the Calibration, Set up, Repair, and Maintenance for Application Rigs in the first bullet, delete the words "carbon steel."

Midas 33:67 label for sale and use in states other than Florida

- On page 20 under the Calibration, Set up, Repair, and Maintenance for Application Rigs in the first bullet, delete the words "carbon steel."

The labels associated with these changes have been previously stamped "Accepted with Comments" and are dated June 8, 2010. Submit one copy of the final printed labels that incorporates the required changes before the product is released for shipment. If you have any questions, please contact Andrea Carone by phone at (703) 308-0122 or via email at carone.andrea@epa.gov or Mary Waller by phone at (703) 308-9354 or via email at waller.mary@epa.gov.


Sincerely,

Mary L. Waller
Product Manager (21)
Fungicide Branch
Registration Division (7504P)

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 		A. Signature X <i>[Signature]</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee	
1. Article Addressed to: <i>W.A. Hawkins, Jr., Ph.D.</i> <i>Aryta Life Science No America</i> <i>15401 Weston Parkway</i> <i>Suite 150</i> <i>Cary, N.C. 27513</i>		B. Received by (Printed Name) <i>Don Pile</i>	C. Date of Delivery
2. Article Number (Transfer from service label) <i>7008 3230 0000 9481 9749</i>		D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
		3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
		4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

UNITED STATES POSTAL SERVICE



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Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •

Mary Waller
EPA
1200 Penna. ave n.w.
Washington, DC 20460

7504 P *66330-59*

7008 3230 0000 9481 9749

U.S. Postal Service™
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For delivery information visit our website at www.usps.com®

OFFICIAL USE

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Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To	W. A. Hawkins, Jr. Ph.D.
Street, Apt. No., or PO Box No.	15401 Weston Parkway
City, State, ZIP+4	Chapel Hill, N.C. 27513

PS Form 3800, August 2006

See Reverse for Instructions



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

CERTIFIED MAIL

W.A. Hawkins, Jr., Ph.D.
Arysta LifeScience North America
15401 Weston Parkway, Suite 150
Cary, NC 27513

JUN 8 2010

Subject: Midas 33:67
EPA Reg. No. 66330-59
Pre-RED Mitigation Amendment – April 1, 2010
EPA Decision Number 434482

Dear Dr. Hawkins:

The amended label referred to above, submitted in connection with reregistration of chloropicrin under the Federal Insecticide, Fungicide and Rodenticide Act as amended is acceptable provided the following label revisions are made and the following conditions are met:

LABEL REVISIONS FOR Midas 33:67 (For sale and use in Florida only)

1. On page 2 under the PPE section, revise the paragraph that begins, **"All Handlers (including applicators) while performing..."** to read, **"When performing tasks with liquid contact potential, all handlers (including applicators) must wear:"**
2. On page 3 under the PPE section, revise the paragraph that begins, **"All Handlers (including applicators) present in either..."** to read, **"When not performing tasks with liquid contact potential, all handlers (including applicators) present in either the application block (i.e., a field or portion of a field treated with a fumigant in any 24-hour period) until 5 days (120 hours) after the application is complete (i.e., after soil has been sealed) or the buffer zone during the buffer zone period (see exception for transient travel in the Buffer Zone section) must wear:"**
3. On page 3 under the PPE section,
 - a. revise the paragraph that begins, **"All Handlers (including applicators) present in the application block..."** to read, **"When not performing tasks with liquid contact potential, all handlers (including applicators) present in the application block (i.e., a field or portion of a field treated with a fumigant in a 24-hour period) 5 days (120 hours) after the application is complete (i.e., after soil has been sealed) until the entry restricted period expires must wear:"**
 - b. in the same section, revise "number 3" to read "number 2."

4. On page 3, revise the language after the subheading "**IMPORTANT**" to read, "A self-contained breathing apparatus (SCBA) is not permitted for routine handler tasks. Wear an SCBA and PPE required for liquid contact potential in emergencies such as a spill or leak or when corrective action is needed to reduce air levels to acceptable levels."
5. On page 6 in the first paragraph under number 2, revise "operation" to "operations."
6. On page 7, revise the **Fumigant Safe Handling** paragraph to read, "The Certified Applicator must provide **Fumigant Safe Handling** information to each handler involved in the application or confirm that each handler participating in the application has received **Fumigant Safe Handling** information in a manner they can understand within the past 12 months. **Fumigant Safe Handling** information will be provided where this product is purchased, or at <http://www.epa.gov/fumiganttraining>."
7. On page 8, revise the subheading and text under "Air-Rescue Device Availability. . ." to read "**AVAILABILITY OF RESPIRATORS FOR EMERGENCIES**
The employer of any handler must confirm that at least one self-contained breathing apparatus (SCBA) is on-site and is ready for use in case of an emergency. This must be documented in the FMP."
8. On page 8 in the Entry Restricted Period, delete "until" in the fourth bullet.
9. On page 9 in the Tarp Perforation and/or Removal section under the "Early Tarp Perforation for Flood Prevention Activities" bullet, revise the first sub-bullet to read, "Tarp perforation is allowed before the 5 or 10 days have elapsed."
10. On page 11 in the Buffer Zone table, delete footnote 4, and on page 10, delete the reference to footnote 4 in the column header.
11. On page 12 in the Spill and Leak section, revise
 - a. the first bullet to read, "For entry into the affected area to correct problems, wear the personal protective equipment specified in the *Hazards to Humans and Domestic Animals* section of this labeling."
 - b. The second sentence of the sixth bullet to read, "Dispose of contaminated material on site or at an approved waste disposal facility."
12. On page 13 in the last sub-bullet of the Buffer Zone part of the FMP, revise "Certified Operator" to read, "Certified Applicator."
13. On pages 13 and 14, revise the bullet that begins "Air-purifying respirators..." to read, "Air purifying respirators, SCBAs, and other personal protective equipment (PPE) for handlers (handler task; protective clothing; respirator make, model, type, style, and size; respirator cartridge type; respirator cartridge replacement schedule; eye protection; gloves; and other PPE)".

14. On page 14, revise the text "For handlers designated to wear air-purifying respirators. . ."
to read "For handlers designated to wear respirators (air-purifying respirator or SCBA):"
 - Date of medical qualification for respirator(s) that each handler is designated to wear,
 - Date of training for respirator(s) that each handler is designated to wear, and
 - Date of fit-testing for respirator(s) that each handler is designated to wear."
15. On page 14 under the Air Monitoring Plan bullet, make the following revisions:
 - In the first sub-bullet, revise "an air purifying respirator" to read, "a full-face air-purifying respirator."
 - In the third sub-bullet, revise "air-purifying respirators" to read, "a full-face air-purifying respirators."
16. On page 18 in the Soil Moisture Determination Using the USDA Feel and Appearance Method section, delete the following text from the first 4 bullets, "/50 to 75 percent of field capacity."
17. On pages 20 and 21 under the Application Rates for Raised Bed Fumigation heading, revise the last sentence to read, "To calculate the amount of product to be applied, multiply the application rate in lbs MIDAS 33:67/broadcast acre by the appropriate modifier from the Field Rate Modifier Table below, e.g., 520 lbs MIDAS 33:67/broadcast acre * 0.50 = 260 lbs MIDAS 33:67/treated acre."
18. On page 22, revise the application rate for the Tree Replant from "2 lbs" to "1.5 lbs".
19. On page 23, add the heading "Container Disposal" above the subheading "Return of Containers".

LABEL REVISIONS FOR Midas 33:67 (For sale and use in states other than Florida)

1. On page 2 under the PPE section, revise the paragraph that begins, "**All Handlers (including applicators) while performing...**" to read, "**When performing tasks with liquid contact potential, all handlers (including applicators) must wear:**"
2. On page 3 under the PPE section, revise the paragraph that begins, "**All Handlers (including applicators) present in either...**" to read, "**When not performing tasks with liquid contact potential, all handlers (including applicators) present in either the application block (i.e., a field or portion of a field treated with a fumigant in any 24-hour period) until 5 days (120 hours) after the application is complete (i.e., after soil has been sealed) or the buffer zone during the buffer zone period (see exception for transient travel in the Buffer Zone section) must wear:**"
3. On page 3 under the PPE section, revise the bullet that begins, "For tractor drivers and tractor co-pilots..." to read, "For tractor drivers and tractor co-pilots the following can be

used in lieu of a half-face air-purifying respirator.”

4. On page 3 under the PPE section, revise the paragraph that begins, “**All Handlers (including applicators) present in the application block...**” to read, “**When not performing tasks with liquid contact potential, all handlers (including applicators) present in the application block (i.e., a field or portion of a field treated with a fumigant in a 24-hour period) 5 days (120 hours) after the application is complete (i.e., after soil has been sealed) until the entry restricted period expires must wear:**”
5. On page 4, revise the language after the subheading “**IMPORTANT**” to read, “A self-contained breathing apparatus (SCBA) is not permitted for routine handler tasks. Wear an SCBA and PPE required for liquid contact potential in emergencies such as a spill or leak or when corrective action is needed to reduce air levels to acceptable levels.”
6. On pages 6 and 7, revise number 2 Air Fan Dilution Equipment to read,
“The following procedures must be followed to determine whether a full-face air-purifying respirator is required or if operations must cease for tractor drivers and tractor co-pilots using a tractor equipped with a working-area air-fan dilution system:
 - If at any time tractor drivers and/or tractor co-pilots experience sensory irritation (tearing, burning of the eyes or nose) then either:
 - A full-face air-purifying respirator must be worn by all tractor drivers and tractor co-pilots who remain in the application block and/or buffer zone **or**
 - Operations must cease and tractor drivers and tractor co-pilots not wearing full-face air-purifying respirators must leave the application block and/or buffer zone.
 - Tractor drivers and tractor co-pilots can remove full-face air-purifying respirators or resume operations if all of the following conditions exist:
 - Two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show that levels of chloropicrin have decreased to less than 0.15 ppm,
 - Tractor drivers and tractor co-pilots do not experience sensory irritation, and
 - The air-fan dilution system is operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.
 - During the collection of air samples, a full-face air-purifying respirator must be worn by the handler taking air samples. Samples must be taken where the sensory irritation is first experienced.
 - When using monitoring devices to monitor air concentration levels, a direct reading detection device, such as a Matheson-Kitagawa, Dräger, or Sensidyne device, must be used. The devices must have a sensitivity of at least 0.15 ppm for chloropicrin.
 - When breathing zone samples are required, they must be taken outside respiratory protection equipment and within a ten inch radius of the handler’s nose and mouth.
 - When full-face air-purifying respirators are worn, then air monitoring samples must be collected at least every two hours in the breathing zone of a representative tractor driver or tractor co-pilot.

- If at any time (1) a tractor driver and/or tractor co-pilot experiences any sensory irritation when wearing a full-face air-purifying respirator, or (2) an air sample is greater than or equal to 1.5 ppm, then all activities must cease and tractor drivers and tractor co-pilots must be removed from the application block and/or buffer zone. If operations cease, the emergency plan detailed in the FMP must be implemented.
 - Tractor drivers and co-pilots can resume work activities without full-face air-purifying respirators if all of the following conditions exist:
 - Two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show levels of chloropicrin have decreased to less than 0.15 ppm,
 - Tractor drivers and tractor co-pilots do not experience sensory irritation, and
 - The air-fan dilution system is operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.
 - During the collection of air samples a full-face air purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.
 - Work activities can resume if all of the following conditions exist provided that a full-face air-purifying respirator is worn:
 - Two consecutive chloropicrin breathing zone samples taken at the handling site at least 15 minutes apart must be less than 1.5 ppm, but are greater than 0.15 ppm,
 - Tractor drivers and tractor co-pilots do not experience sensory irritation while wearing the full-face air-purifying respirator,
 - Respirator cartridges have been changed, and
 - The air-fan dilution system is operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.
 - During the collection of air samples, a full-face air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.”
7. On page 7 in the first paragraph under number 3, revise “operation” to “operations.”
8. On page 8, revise the **Fumigant Safe Handling** paragraph to read, “The Certified Applicator must provide **Fumigant Safe Handling** information to each handler involved in the application or confirm that each handler participating in the application has received **Fumigant Safe Handling** information in a manner they can understand within the past 12 months. **Fumigant Safe Handling** information will be provided where this product is purchased, or at <http://www.epa.gov/fumiganttraining>.”
9. On page 9, revise the subheading and text under “Air-Rescue Device Availability. . .” to read “**AVAILABILITY OF RESPIRATORS FOR EMERGENCIES**
The employer of any handler must confirm that at least one self-contained breathing apparatus (SCBA) is on-site and is ready for use in case of an emergency. This must be documented in the FMP.”

10. On page 9 in the Entry Restricted Period, delete "until" in the fourth bullet.
11. On page 10 in the Tarp Perforation and/or Removal section under the "Early Tarp Perforation for Flood Prevention Activities" bullet, revise the first sub-bullet to read, "Tarp perforation is allowed before the 5 or 10 days have elapsed."
12. On page 12 in the Buffer Zone table in the second bullet under footnote 2, revise "films" to read, "tarps."
13. On page 12 in the Buffer Zone table, delete footnote 4, and the reference to footnote 4 in the column header.
14. On page 14 in the Spill and Leak section, revise
 - a. the first bullet to read, "For entry into the affected area to correct problems, wear the personal protective equipment specified in the *Hazards to Humans and Domestic Animals* section of this labeling."
 - b. the second sentence of the sixth bullet to read, "Dispose of contaminated material on site or at an approved waste disposal facility."
15. On page 15, revise the bullet that begins "Air-purifying respirators..." to read, "Air purifying respirators, SCBAs, and other personal protective equipment (PPE) for handlers (handler task; protective clothing; respirator make, model, type, style, and size; respirator cartridge type; respirator cartridge replacement schedule; eye protection; gloves; and other PPE)".
16. On page 15, revise the text "For handlers designated to wear air-purifying respirators. . ." to read "For handlers designated to wear respirators (air-purifying respirator or SCBA):"
 - Date of medical qualification for respirator(s) that each handler is designated to wear,
 - Date of training for respirator(s) that each handler is designated to wear, and
 - Date of fit-testing for respirator(s) that each handler is designated to wear."
17. On page 16 under the Air Monitoring Plan bullet, make the following revisions:
 - In the first sub-bullet, revise "an air purifying respirator" to read, "a full-face air-purifying respirator."
 - In the third sub-bullet, revise "air-purifying respirators" to read, "a full-face air-purifying respirators."
18. On pages 19 and 20 in the Soil Moisture Determination Using the USDA Feel and Appearance Method section, delete the following from the first 4 bullets, "50 to 75 percent of field capacity."
19. On page 22 under the Application Rates for Raised Bed Fumigation heading, revise the last sentence to read, "To calculate the amount of product to be applied, multiply the application rate in lbs MIDAS 33:67/broadcast acre by the appropriate modifier from the

Field Rate Modifier Table below, e.g., 520 lbs MIDAS 33:67/broadcast acre * 0.50 = 260 lbs MIDAS 33:67/treated acre."

20. On page 23, revise the application rate for the Tree Replant from "2 lbs" to "1.5 lbs".
21. On page 24, add the heading "Container Disposal" above the subheading "Return of Containers".

CONDITIONS

1. EPA has determined that the risk mitigation measures on the revised label for this product are necessary to adequately protect human health and the environment. Therefore, pursuant to 40 CFR § 152.130(d), EPA has decided that no product bearing previously approved labeling may be sold or distributed (release for shipment) by its registrant after December 1, 2010. Wherever state approval is required for sale or distribution of this product with this new labeling, EPA strongly encourages you to submit an application to the state authority as soon as possible. You should be aware that the Agency does not intend to modify the December 1, 2010, deadline because of any failure to obtain necessary state approvals.
2. Submit one copy of the final printed label that incorporates the required changes before the product is released for shipment.

One copy of the label stamped "Accepted with comments" is enclosed for your records. If you have any questions, please contact Andrea Carone by phone at (703) 308-0122 or via email at carone.andrea@epa.gov or Mary Waller by phone at (703) 308-9354 or via email at waller.mary@epa.gov.

Sincerely,



Mary L. Waller
Product Manager (21)
Fungicide Branch
Registration Division (7504P)

Enclosure

**RESTRICTED USE PESTICIDE
 DUE TO ACUTE TOXICITY**

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

MIDAS® 33:67

FOR SALE AND USE IN FLORIDA ONLY

Only For Pre-Plant Fumigations of Fields Intended for Commercial Production of Listed Crops and Field-Grown Ornamentals, for the Control of Soil-Borne Pests Including Weed Seeds, Nematodes, Insects, and Diseases.

ACTIVE INGREDIENTS:

Iodomethane.....32.93%
 Chloropicrin.....66.67%
 OTHER INGREDIENTS:.....0.40%
TOTAL:.....100.00%

One gallon weighs 15.1 pounds (5 pounds Iodomethane and 10.1 pounds Chloropicrin).

**KEEP OUT OF REACH OF CHILDREN
 DANGER / PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
 (If you do not understand the label, find someone to explain it to you in detail).

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person.
<p align="center">HOT LINE NUMBERS</p> <p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p> <p align="center">FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL: 1-866-303-6952 or 1-651-632-8946</p>	
<p>NOTE TO PHYSICIAN</p> <p>Probable mucosal damage may contraindicate the use of gastric lavage. Symptoms of overexposure may include irritation to eyes, skin, and respiratory system, shortness of breath, nausea, vomiting, dizziness, ataxia, slurred speech, drowsiness, blurred vision, staggering gait and mental imbalance, with probable recovery after period of no exposure. Treatment is symptomatic.</p>	

**ACCEPTED
 with COMMENTS
 In EPA Letter Dated:**

6/8/2010

Under the Federal Insecticide,
 Fungicide, and Rodenticide Act,
 as amended, for the pesticide
 registered under EPA Reg. No. 66330-59

EPA Reg. No. 66330-59
EPA Est. No.

For Product Information Call: 1-866-761-9397

Net Contents: _____ LBS.

Manufactured for
Arysta LifeScience North America, LLC
15401 Weston Parkway, Suite 150
Cary, NC 27513

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

Danger. Corrosive. Causes irreversible eye damage. Corrosive to skin. Causes skin burns. May be fatal if inhaled or swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin or on clothing. Do not breathe vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SPECIAL NOTE: This product contains chloropicrin, a poisonous liquid or vapor. Inhalation of vapors may be fatal. Chloropicrin is readily identified by smell. Exposure to very low concentrations of vapor will cause irritation of eyes, nose and throat. Continued exposure after irritation is evident or higher concentrations may cause painful irritation to the eyes or temporary blindness. Liquid will cause chemical burns to skin or eyes. Do not get on skin, in eyes, or on clothing. Chloropicrin fumigant has the capacity to cause marked irritation to the upper respiratory tract and is a strong lachrymator (tear producing eye irritant). Low concentrations, below those necessary to cause serious systemic intoxication, are capable of causing severely painful eye irritation, hence will not be voluntarily tolerated. However, the effect may be so powerful that a person may become temporarily blinded and panic-stricken and that in turn may lead to accidents.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminate or viton \geq 14 mils. For more options, follow the instructions for category H on the chemical-resistance category selection chart.

All Handlers (including applicators) while performing tasks with liquid contact potential (including, but not limited to, supervisors, loaders, tractor drivers, and persons involved with spill recovery, container disposal, and equipment repair when within arm's length proximity and handling, adjusting or securing charged/pressurized lines, supply tubing, cylinders/tanks and other delivery equipment that contains liquid fumigant when cylinder/tank valves are in the open position) **must wear:**

- Loose fitting or well ventilated long-sleeved shirt and long pants,
- Chemical-resistant gloves,
- Chemical-resistant apron,
- Chemical-resistant footwear and socks,
- Full face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles, and
- A half face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C).
- In addition, if sensory irritation (tearing, burning, of the eyes or nose) is experienced while wearing a half-face air-purifying respirator, handlers must wear at a minimum a full-face air-

purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C). See Directions for Use, Protection for Handlers, Respiratory Protection and Stop Work Triggers, number 1: *Handlers Wearing Half-Face Air-Purifying Respirators*, for when a full-face respirator is required.

All Handlers (including applicators) present in either the application block (i.e., a field or portion of a field treated with a fumigant in any 24-hour period) until 5 days (120 hours) after the application is complete (i.e., after tarps have been laid) or the buffer zone during the buffer zone period (to include supervisors, tractor drivers, co-pilots, shovelers, cross ditchers, and tarp monitors) (see exception for transient travel in the Buffer Zone section) must wear:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles.
- A half face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C).
- In addition, if sensory irritation (tearing, burning, of the eyes or nose) is experienced while wearing a half-face air-purifying respirator, handlers must wear at a minimum a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C). See Directions for Use, Protection for Handlers, Respiratory Protection and Stop Work Triggers, number 1: *Handlers Wearing Half-Face Air-Purifying Respirators*, for when a full-face respirator is required.
- Do not wear jewelry, gloves, goggles, tight clothing, rubber protective clothing, or rubber boots when handling. Iodomethane and chloropicrin are heavier than air and can be trapped inside clothing and cause skin injury.

All Handlers (including applicators) present in the application block (i.e., a field or portion of a field treated with a fumigant in any 24-hour period) 5 days (120 hours) after the application is complete (i.e., after tarps have been laid) until the entry restricted period expires (to include planters, hole punchers, tarp cutters, tarp removers, tarp remover drivers, and persons involved with tarp and irrigation repair, air monitoring, scouting/crop advising) must wear:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles.
- In addition, if sensory irritation (tearing, burning, of the eyes or nose) is experienced, handlers must wear at a minimum a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C). See Directions for Use, Protection for Handlers, Respiratory Protection and Stop Work Triggers, number 3: *Handlers in the Application Block 5 days (120 hours) after the Application is Complete until the Entry Restricted Period Expires*, for when a full-face respirator is required.
- Do not wear jewelry, gloves, goggles, tight clothing, rubber protective clothing, or rubber boots when handling. Iodomethane and chloropicrin are heavier than air and can be trapped inside clothing and cause skin injury.

IMPORTANT: an air-supplying respirator [i.e., a respirator connected directly to a clean air source or a self-contained breathing apparatus (SCBA)] is not permitted for routine handler tasks. Such respirators are only permitted in emergencies such as a spill or leak or when corrective action is needed to reduce air levels to acceptable levels.

User Safety Requirements

- Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them.
- Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing and gloves, if worn, immediately if pesticide gets inside, then wash skin thoroughly and put on clean clothing and gloves, if worn.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to mammals and birds. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate. Iodomethane and chloropicrin have certain properties and characteristics in common with chemicals that have been detected in ground water (iodomethane and chloropicrin are highly soluble in water and have low adsorption to soil).

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat, open flames, or sparking electrical equipment. Do not use application devices containing natural rubber, aluminum, magnesium or their alloys.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during the application.

For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), restricted entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

For the entry restricted period and notification requirements, see the **Entry Restricted Period and Notification** sections of this labeling.

PPE for Entry During the Entry Restricted Period: PPE for entry that is permitted by this labeling is listed in the Hazards to Humans and Domestic Animals section of this labeling.

HANDLERS

The following activities are prohibited from being performed in the application block (i.e., the field or portion of a field treated with a fumigant in any 24-hour period) by anyone other than persons who have been appropriately trained and equipped as handlers in accordance with the requirements in the Worker Protection Standard (40 CFR Part 170), from the start of the application until the entry restricted period ends (NOTE: persons installing, perforating, removing, repairing, and monitoring tarps are considered handlers for the durations listed below). Those activities include those persons:

- Participating in the application as supervisors, loaders, drivers, tractor co-pilots, shovelers, cross ditchers, or as other direct application participants (the application starts when the fumigant is first introduced into the soil and ends after the fumigant has stopped being delivered/dispensed to the soil);
- Using devices to take air samples to monitor fumigant air concentrations;
- Cleaning up fumigant spills (this does not include emergency personnel not associated with the fumigation application);
- Handling or disposing of fumigant containers;
- Cleaning, handling, adjusting, or repairing the parts of fumigation equipment that may contain fumigant residues;
- Installing, repairing, operating, or removing irrigation equipment in the fumigant application block;
- Entering the application site to perform scouting, crop advising, or monitoring tasks;
- Installing, perforating (cutting, punching, slicing, poking), removing, repairing, or monitoring tarps:
 - until 14 days after application is complete if tarps are not perforated and removed during those 14 days, or
 - until tarp removal is complete if tarps are **both** perforated **and** removed less than 14 days after application, or
 - until 48 hours after tarp perforation is complete if they will not be removed within 14 days after application.

NOTE: See Tarp Perforation and/or Removal section on this labeling for requirements about when tarps are allowed to be perforated.

- Performing any handling tasks as defined by the WPS.

PROTECTION FOR HANDLERS

Respiratory Protection and Stop Work Triggers

1. Handlers Wearing Half-Face Air-Purifying Respirators

The following procedures must be followed to determine whether a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent, is required or if operations must cease for handlers wearing a half-face air-purifying respirator:

- If at any time any handler experiences sensory irritation (tearing, burning of the eyes or nose) while wearing a half-face air-purifying respirator:
 - A full-face air-purifying respirator must be worn by all handlers who remain in the application block and/or buffer zone, **or**
 - Operations must cease and handlers not wearing full-face air-purifying respirators must leave the application block and/or buffer zone.
- When full-face air-purifying respirators are worn, then air-monitoring samples for chloropicrin must be collected at least every 2 hours in the breathing zone of a handler performing a representative handling task.
- When using monitoring devices to monitor air concentration levels, a direct reading detection device, such as a Matheson-Kitagawa, Dräger, or Sensidyne device must be used. The devices must have a sensitivity of at least 0.15 ppm for chloropicrin.
- When breathing zone samples are required, they must be taken outside respiratory protection equipment and within a ten inch radius of the handler's nose and mouth.
- If at any time (1) a handler experiences any sensory irritation when wearing a full-face air-purifying respirator; or (2) an air sample is greater than or equal to 1.5 ppm, then all handler activities must cease and handlers must be removed from the application block and buffer zone. If operations cease, the emergency plan detailed in the FMP must be implemented.

- Handlers can remove full-face air-purifying respirators or resume work activities if all of the following conditions exist provided that a half-face air-purifying respirator is worn:
 - Two consecutive breathing zone samples for chloropicrin taken at the handling site at least 15 minutes apart must be less than 1.5 ppm;
 - Handlers do not experience sensory irritation; and
 - Air-purifying respirator cartridges have been changed.
 - During the collection of air samples a full-face air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.

2. Handlers in the Application Block 5 days (120 hours) after the Application is Complete until the Entry Restricted Period Expires

The following procedures must be followed to determine whether a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent, is required or if operation must cease for handlers in the application block after the application is complete

- If at any time any handler experiences sensory irritation (tearing, burning of the eyes or nose) then either:
 - A full-face air-purifying respirator must be worn by all handlers who remain in the application block **or**
 - Operations must cease and handlers not wearing respiratory protection must leave the application block.
- Handlers can remove full-face air-purifying respirators or resume operations if two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show that levels of chloropicrin have decreased to less than 0.15 ppm provided that handlers do not experience sensory irritation. During the collection of air samples, a full-face air-purifying respirator must be worn by the handler taking air samples. Samples must be taken where the sensory irritation is first experienced.
- When using monitoring devices to monitor air concentration levels, a direct reading detection device, such as a Matheson-Kitagawa, Dräger, or Sensidyne device, must be used. The devices must have a sensitivity of at least 0.15 ppm for chloropicrin.
- When breathing zone samples are required, they must be taken outside respiratory protection equipment and within a ten inch radius of the handler's nose and mouth.
- When full-face air-purifying respirators are worn, then air monitoring samples must be collected at least every two hours in the breathing zone of a handler performing a representative handling task.
- If at any time (1) a handler experiences any sensory irritation when wearing a full-face air-purifying respirator, or (2) an air sample is greater than or equal to 1.5 ppm, then all handler activities must cease and handlers must be removed from the application block. If operations cease, the emergency plan detailed in the FMP must be implemented.
- Handlers can resume work activities without full-face air-purifying respirators if two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show levels of chloropicrin have decreased to less than 0.15 ppm, provided that handlers do not experience sensory irritation. During the collection of air samples a full-face air purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.
- Work activities can resume if all of the following conditions exist provided that a full-face air-purifying respirator is worn:
 - Two consecutive chloropicrin breathing zone samples taken at the handling site at least 15 minutes apart must be less than 1.5 ppm, but are greater than 0.15 ppm;
 - Handlers do not experience sensory irritation while wearing the full-face air-purifying respirator; and
 - Cartridges have been changed.
 - During the collection of air samples, a full-face air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.

Supervision of Handlers

For all applications: From the start of the application until the fumigant has stopped being delivered/dispensed into the soil, i.e., after the soil is sealed, an Arysta trained and state certified applicator must be at the fumigation site in the line of sight of the application and must directly supervise all persons performing handling activities.

For handling activities that take place after the fumigant has been delivered/dispensed into the soil until the entry restricted period expires, the Certified Applicator does not have to be on-site, but must have communicated, in a manner that can be understood, to the site owner/operator and handlers responsible for carrying out those activities the information necessary to comply with the label and procedures described in the FMP (e.g., emergency response plans and procedures). Communication activities must be captured in the FMP.

IMPORTANT: This requirement does not override the requirements in the Worker Protection Standard for Agricultural Pesticides for information exchange between owners/operators of agricultural establishments and commercial pesticide applicators.

The Certified Applicator must provide **Fumigant Safe Handling** information to each handler involved in the application or confirm that each handler participating in the application has received **Fumigant Safe Handling** information in the past 12 months. **Fumigant Safe Handling** information will be provided where this product is purchased, or at (*insert EPA website*).

For all handling tasks at least two handlers trained under the provisions of the WPS 40 CFR 170.230 must be present.

Respirator Fit Testing, Medical Qualification and Training

Employers must verify that any handler who uses a respirator is:

- Fit-tested and fit-checked using a program that conforms to OSHA's requirements (see 29 CFR Part 1910.134)
- Trained using a program that conforms to OSHA's requirements (see 29 CFR Part 1910.134)
- Examined by a qualified medical practitioner to ensure physical ability to safely wear the style of respirator to be worn. A qualified medical practitioner is a physician or other licensed health care professional who will evaluate the ability of a worker to wear a respirator. The initial evaluation consists of a questionnaire that asks about medical conditions (such as a heart condition) that would be problematic for respirator use. If concerns are identified, then additional evaluations, such as a physical exam, might be necessary. The initial evaluation must be done before respirator use begins. Handlers must be reexamined by a qualified medical practitioner if their health status or respirator style or use-conditions change. Upon request by local/state/federal/tribal enforcement personnel, employers must provide documentation demonstrating how they have complied with these requirements.

Providing, Cleaning and Maintaining PPE

The employer of any handler (as stated in this label) must make sure that all handlers are provided and correctly wear the required PPE. The PPE must be cleaned and maintained as required by the Worker Protection Standard for Agricultural Pesticides.

Air-Purifying Respirator Availability

At a minimum two handlers must have the appropriate air-purifying respirator and cartridges available and these handlers must be fit-tested, trained and medically examined.

The employer of any handler must confirm that an air-purifying respirator and appropriate cartridges of the type specified in the PPE section of this labeling are immediately available for each handler who will wear one. This must be documented in the FMP.

Cartridges or canisters must be replaced when odor or irritation from this product becomes apparent, if the measured concentration of chloropicrin is greater than or equal to 1.5 ppm, or after 8 hours of use, whichever occurs first.

Air-Rescue Device Availability

The employer of any handler must confirm that at least one air-rescue device (e.g., SCBA) is on-site and is ready for use in case of an emergency. This must be documented in the FMP.

Exclusion of Non-Handlers from Application Block:

The Certified Applicator supervising the application and the owner/operator of the establishment where the fumigation is taking place must make sure that all persons who are not trained and PPE-equipped and who are not performing one of the handling tasks as stated in this labeling are excluded from the application block during the entry restricted period and from the buffer zone during the buffer zone period.

Entry Restricted Period

Entry (including early entry that would otherwise be permitted under the WPS) by any person, other than a correctly trained and PPE-equipped handler who is performing a handling task listed on this labeling, is PROHIBITED from the start of the application until:

- 5 days (120 hours) after the application is complete for untarped applications, or
- 5 days (120 hours) after application is complete if tarps are not perforated and removed for at least 14 days following application, NOTE: Persons installing, repairing, or monitoring tarps are handlers until 14 days after the application is complete if tarps are not perforated and removed during those 14 days, or
- 48 hours after tarp perforation is complete if tarps will not be removed for at least 14 days following application, or
- Until tarp removal is completed if tarps are both perforated and removed less than 14 days after application.

NOTE: See **Tarp Perforation and/or Removal** section on this labeling for requirements about when tarps are allowed to be perforated.

Notification

Notify workers of the application by warning them orally and by posting Fumigant Treated Area signs. The Fumigant Treated Area signs must bear the skull and crossbones symbol and state:

- (1) "DANGER/PELIGRO"
- (2) "Areas under fumigation, DO NOT ENTER/NO ENTRE"
- (3) Iodomethane/Chloropicrin Fumigant In Use
- (4) Date and time of fumigation
- (5) Date and time entry restricted period is over
- (6) MIDAS 33:67 and
- (7) Name, address, and telephone number of the Certified Applicator in charge of the fumigation.

Post the Fumigant Treated Area sign instead of the WPS sign for this application but follow all WPS requirements pertaining to location, legibility, size and timing of posting and removal.

Post the Fumigant Treated Area signs at all entrances to the application block (i.e., the field or portion of a field treated with a fumigant in any 24-hour period.)

Tarp Perforation and/or Removal

IMPORTANT: Persons perforating, repairing, removing, and/or monitoring tarps are defined, within certain time limitations, as handlers (see handlers as stated in this labeling) and must be provided the PPE and other protections for handlers as required on this labeling and in the Worker Protection Standard for Agricultural Pesticides.

- Standard tarps must not be perforated until a minimum of 5 days (120 hours) have elapsed after the fumigant injection into the soil is complete (e.g., after tarps have been laid), unless a weather condition exists which necessitates early perforation or removal, **see *Early Tarp Removal for Broadcast Applications Only* and *Early Tarp Perforation for Flood Prevention Activities*** sections. Highly retentive tarps (on an Arysta approved list) must not be perforated until a minimum of 10 days (240 hours) have elapsed after the fumigation injection into the soil is complete.
- If tarps will be removed before planting, tarp removal must not begin until at least 2 hours after tarp perforation is complete.
- If tarps will not be removed before planting, planting or transplanting must not begin until at least 48 hours after the tarp perforation is complete.
- If tarps are left intact for a minimum of 14 days after fumigant injection into the soil is complete, planting or transplanting may take place while the tarps are being perforated.
- Each tarp panel used for broadcast fumigation must be perforated.
- Tarps used for fumigations may be perforated manually **ONLY** for the following situations:
 - At the beginning of each row when a coulter blade (or other device which performs similarly) is used on a motorized vehicle such as an ATV.
 - In fields that are 1 acre or less.
 - During flood prevention activities.
- In all other instances tarps must be perforated (cut, punched, poked, or sliced) only by mechanical methods.
- Tarp perforation for broadcast fumigations must be completed before noon.
- For broadcast fumigations, tarps must not be perforated if rainfall is expected within 12 hours.
- ***Early Tarp Removal for Broadcast Applications Only:***
 - Tarps may be removed before the required 5 days (120 hours) or 10 days (240 hours) if adverse weather conditions have compromised the integrity of the tarp, provided that the compromised tarp poses a safety hazard. *Adverse weather* includes high wind, hail, or storms that blow tarps off the field and create a hazard, e.g., tarps blowing into power lines and onto roads. A *compromised tarp* is a tarp that due to an adverse weather condition is no longer performing its intended function and is creating a hazard.
 - If tarps are removed before the required 5 days (120 hours) or 10 days (240 hours) have elapsed due to adverse weather, the events must be documented in the post-application summary.
- ***Early Tarp Perforation for Flood Prevention Activities***
 - Tarp perforation is allowed before the 5 days have elapsed.
 - Tarps must be immediately retucked and packed after soil removal.

Buffer Zone

The area adjacent to the treated area is referred to as the buffer zone. The buffer zone shall extend from the edge of the treated area in all directions. See Buffer Zone Table. The minimum buffer zone distance shall be 25 feet.

The Certified Applicator supervising the soil fumigation is responsible for the following:

1. Calculating the appropriate size of the buffer zone that must be maintained from the start of the application until 48 hours following the end of the application;
2. Establishing and maintaining the buffer zone from the start of the application until 48 hours following the end of the application. Buffer zones must be on the property under the control of the Certified Applicator and must not include property that is not under the control of the Certified Applicator unless written permission is obtained prior to fumigation, including signature, from responsible parties from all properties that will be included or partially included in the buffer zone. Buffer zones shall not extend onto public roads or areas, or onto any other land for which written consent is not attainable. The Certified Applicator must use an appropriate means to manage and maintain the buffer zone such as posting Buffer Zone signs around the perimeter of the buffer zone at potential points of entry, using trained workers to patrol the buffer zone, or other equivalent means. If Buffer Zone signs are used, they must be posted from the start of the application until 48 hours following the end of the application and must be removed within 3 days

of the end of the buffer zone period. The Buffer Zone signs must include the same warning symbol and statements required for Fumigant Treated Area signs as stated on this label with the exception that signs will indicate "Fumigant Buffer Zone" at the top of the sign and will delete the statement "areas under fumigation".

3. Ensuring that unprotected workers and bystanders do not enter the buffer zone from the start of the application until 48 hours following the end of the application. Exception: Unprotected workers and bystanders may travel through (but not engage in any activity in) the buffer zone during the application and the 48-hour period following the end of the application, provided their total exposure time in any 24-hour period is 15 minutes or less. However, travel by unprotected workers or bystanders through the fumigated area itself is prohibited during the entire Entry Restricted period. Handlers protected with required Personal Protective Equipment (PPE) may work in buffer zones. See the PERSONAL PROTECTIVE EQUIPMENT section.
4. Ensuring application site has a distinctive buffer zone. The buffer zone of the field to be treated cannot overlap the buffer zone of another field treated within the last 48 hours.
5. Ensuring that there are no occupied nursing homes, hospitals, or prisons; and no occupied licensed schools, licensed day care facilities and licensed assisted living facilities (licensed by state or local governments) within ¼ mile of the fumigated area during the buffer zone period.

Determining Buffer Zone Distance

- Determine the size of the buffer zone using the following Buffer Zone Table.
- The size of the buffer zone will be dependent on the following three factors:
 - The number of field acres that are being treated with MIDAS 33:67.
 - The pounds of MIDAS 33:67 that are being applied per treated acre.
 - Buffer zone reduction credits.

Buffer Zone Table

MIDAS 33:67 Application Rate (Lbs per Treated Acre) ⁴	SIZE OF FIELD IN ACRES (Buffer zone distance in feet) ^{1,2}							
	Up to 5 Acres	6 – 10 Acres	11-15 Acres	16- 20 Acres	21-25 Acres	26-30 Acres	31-35 Acres	36-40 ³ Acres
100	25	25	45	60	70	80	90	95
150	25	30	60	85	100	115	130	145
175	25	35	70	100	120	135	150	165
200	25	40	80	115	135	155	175	190
250	25	50	95	140	165	190	215	235
300	30	60	115	170	200	230	260	285
350	35	70	135	200	235	265	300	330
360	35	70	140	205	240	275	310	340
400	40	75	150	225	265	305	345	380
500	50	95	190	285	335	380	430	475
520	50	100	200	300	350	400	450	500

1. For rates not listed on this table, use the buffer zone for the next highest rate, or use the following calculation to determine the exact buffer zone:

$$\text{Buffer Zone for Application Rate Not Listed} = \frac{\text{Known Buffer Zone on Table} \times \text{Application Rate Not Listed}}{\text{Rate of Application for Known Buffer Zone}}$$

2. Buffer Zone Reduction Credits:

Reduce buffer zone by 10% for each factor listed below:

- Use of flat fume/broadcast application
- Use of highly retentive tarps. Highly retentive tarps for which credit can be applied must be on an Arysta approved list. Examples of Arysta approved tarps are Canslit Brand Metalized 1.3 mil, Pliant Blockade® VIF 1.25 mil, or Pliant Metalized 1.0-1.25.
- Application to soils having >3% organic matter Refer to the USDA or USGS Soil Survey Maps for the treated area that identify the range of organic matter and / or a documented soil survey report

that lists range of % organic matter for the treated area. Collection of samples for analysis of soil in the treated area should follow procedures as per USDA's Natural Resource Conservation Services methods. Information on soil sampling can be found at www.soil.usda.gov.

For example, if the Buffer Zone is 50 feet and the application qualifies for a buffer zone reduction credit such as use of highly retentive tarps, then the buffer zone can be reduced by 10%, i.e., reduced by 5 feet based on the following calculation: $50 \text{ ft} - (50 \text{ ft} \times 10\%) = 45 \text{ feet}$.

If the application qualifies for two buffer zone reduction credits such as use of highly retentive tarps and soil with >3% organic matter, then the buffer zone can be reduced by 20%, i.e., reduced by 10 feet based on the following calculation: $50 \text{ ft} - (50 \text{ ft} \times 20\%) = 40 \text{ feet}$.

3. Applications are limited to 40 contiguous acres or less per day.
4. For raised bed applications, the treated area is the raised bed not the untreated furrows. As an example, if a raised bed field is 50% raised bed (treated) and 50% furrow (untreated), and 350 lbs of MIDAS 33:67 is applied to the raised beds of the field, then the effective application rate to the treated raised bed is 350 lbs per treated acre; and that is the rate that would determine the buffer zone.

Note: Minimum allowable buffer zone is 25 feet regardless of buffer zone reduction credits.

Buffer Zone for Tree Replant – Probe or Auger Applications

- 25 feet if the application rate is less than 150 lbs MIDAS 33:67 per acre.
- 50 feet if application rate is 150 to 379 lbs MIDAS 33:67 per acre, and
- 100 feet if the application rate is 380 to 520 lbs MIDAS 33:67 per acre.

GENERAL INFORMATION AND INSTRUCTIONS

This fumigant is a highly hazardous material. All uses of this fumigant are covered under the Worker Protection Standard, and must be conducted in accordance with all of the requirements of the Worker Protection Standard (40 CFR Part 170). It is a restricted use pesticide that must only be used by Certified Applicators, certified by the state and trained by Arysta, in the proper handling, worker protection, and application of MIDAS 33:67 soil fumigant and handlers under their direct supervision. Before using, read the entire label and follow all use directions and precautions. All persons working with this fumigant must be knowledgeable about the hazards and trained in the use of required air-purifying respirator equipment and detector devices, emergency procedures and proper use of the fumigant.

Control of Soil-Borne Pests: MIDAS 33:67 controls soil-borne pests including nematodes, insects, weed seeds, and diseases.

MIDAS 33:67 will control the following pests when present in soil at the time of treatment:

Weed Seeds, including broadleaf weeds such as nutsedge, pigweed, broomrape and lambsquarters, and grasses such as bermudagrass, and annual bluegrass. Effectiveness against hard seed weeds, such as mallow, dodder, morning glory, and certain leguminous weeds may be variable.

Plant-parasitic Nematodes, such as root-knot, root lesion (meadow), cyst, citrus, burrowing, false root-knot, lance, spiral, ring, stubby root, dagger, awl, sheath and sting (stylet) nematodes.

Soil-borne Insects, such as wireworms, cutworms, grubs, rootworms, ants and garden symphylans.

Soil-borne Diseases, such as *Verticillium*, *Pythium*, *Rhizoctonia*, *Phytophthora*, and *Fusarium*.

MIDAS 33:67 is not to be used as a preventative treatment for pests that may be introduced after the fumigant has been applied and/or tarps removed. To reduce the potential for the re-introduction of pests (nematodes, weed seed and disease); avoid the use of irrigation water, transplants or equipment that

could carry pests into the planting area. Avoid moving infested soil back into the treated area through cultivation or other means.

GENERAL USE PRECAUTIONS

- Follow all local government instructions for posting of treated areas and post all treated areas with warning signs.
- Comply with all local ordinances and regulations.
- Do not apply within ¼ mile of nursing homes, hospitals or prisons; or licensed schools, licensed day care facilities or licensed assisted living facilities (licensed by state or local governments) that will be occupied during the buffer zone period.
- Applications are limited to 40 contiguous acres or less per day.
- Never fumigate alone. A minimum of two persons must be present during handling and application of soil fumigants.
- Additional instructions must be made available to handlers in the mechanical operation of the tractor and how to safely work with the operator while fumigating.
- Always handle this product in the open, with all handlers positioned "upwind" from the container and/or where there is adequate ventilation.
- When fumigating from a tractor, it is required that 5 gallons of water be carried on the tractor and readily available for rinsing and cleaning purposes. An additional 5 gallons of water must be available in the service truck. This water must be potable and in containers marked "Decontamination water not to be used for drinking."
- For broadcast/flat fume applications, keep all pets, livestock and other domestic animals out of the treated areas until tarps have been removed.
- For raised bed applications, keep all pets, livestock and other domestic animals out of the treated areas for 5 days. Most raised bed applications will not result in tarp removal.
- Do not allow entry by unprotected persons into the fumigated area until the Fumigant Treated Area signs are removed.

SPILL AND LEAK PROCEDURES

- For Spill and Leak PPE requirements refer to the Personal Protective Equipment, All Handlers (including applicators) while performing tasks with liquid contact potential section on this label.
- Cease all operations if any leak develops in the fumigation system.
- Evacuate everyone from the immediate area of the spill or leak.
- Approach the area from the upwind side. Work upwind to repair leak(s), if possible.
- Only correctly trained and PPE-equipped handlers are permitted to enter. Do not permit entry into the spill or leak area by any other person until the concentration of chloropicrin is measured to be less than 0.15 ppm.
- Allow spilled fumigant to evaporate or to absorb onto vermiculite, dry sand, earth, or similar absorbent material. Such material should be disposed of on site or at an approved disposal facility.
- Contaminated soil, water and other cleanup debris may be hazardous waste. Report any spill that exceeds 302 lbs (20 gallons of product) to the National Response Center at 1-800-424-8802.

SITE-SPECIFIC FUMIGATION MANAGEMENT PLAN (FMP)

Prior to the start of fumigation, the Certified Applicator supervising the application must verify that a site-specific FMP exists for each application block (i.e., a field or portion of a field treated with a fumigant in any 24-hour period). In addition, an agricultural operation fumigating multiple application blocks may

format the FMP in a manner whereby all of the information that is common to all the application blocks is captured once, and any information unique to a particular application block or blocks is captured in subsequent sections.

The FMP must be prepared by the Certified Applicator, the site owner/operator, registrant or other party.

The Certified Applicator must verify in writing (sign and date) that the site-specific FMP(s) reflects current site conditions before the start of fumigation.

Each site-specific FMP must contain the following elements:

- Applicator information (name, phone number, pesticide applicator license and/or certificate number, employer name, employer address)
- General site information
 - Application block location (e.g., county, township-range-section quadrant), address, or global positioning system (GPS) coordinates
 - Name, address, and phone number of owner/operator of the application block
 - Diagrams and maps
 - Identify nursing homes, hospitals, prisons, licensed schools, licensed day care facilities, or licensed assisted living facilities (licensed by state or local governments) with ¼ mile of the fumigated area, and document how it was determined that such sites would be unoccupied during the application period.
- General application information (target application date/window, brand name of fumigant, EPA registration number)
- Tarp information and procedures for repair, perforation, and removal (if tarp is used)
 - Brand name, lot number, thickness
 - Name and phone number of person responsible for repairing tarps
 - Schedule for checking tarps for damage, tears, and other problems
 - Maximum time following notification of damage that the person(s) responsible for tarp repair will respond
 - Minimum time following application that tarp will be repaired
 - Minimum size of damage that will be repaired
 - Other factors used to determine when tarp repair will be conducted
 - Name and phone number of person responsible for perforating and/or removing tarps (if other than Certified Applicator)
 - Equipment/methods used to perforate tarps
 - Schedule and target dates for perforating tarps
 - Schedule and target dates for removing tarps
- Soil conditions (description of soil texture in application block, method used to determine soil moisture)
- Weather conditions (summary of forecasted conditions for the day of the application and the 48-hour period following the fumigant application)
 - Wind speed
 - Inversion conditions (e.g., shallow, compressed (low-level) temperature inversion)
 - Air stagnation advisory
- Buffer Zones
 - Application method
 - Application rate (pounds of Midas 33:67)
 - Application block size (acres)
 - Credits applied
 - Description of areas in the buffer zone that are not under the control of the owner/operator of the application block and how it was verified that these structures were unoccupied during the buffer zone period, including any consent documentation signed by parties whose properties were outside the control of the Certified Operator but were included in the buffer zone.
- Air-purifying respirators, air-rescue devices, and other personal protective equipment (PPE) for handlers (handler task, protective clothing, air-purifying respirator type, respirator cartridge type,

respirator cartridge replacement schedule, air-rescue device type, eye protection, gloves, other PPE)

- Emergency procedures (evacuation routes, locations of telephones, contact information for first responders, local/state/federal/tribal contacts, key personnel and emergency procedures/responsibilities in case of an incident, equipment/tarp/seal failure or complaints, or other emergencies).
- Fumigant Treated Area and/or Buffer Zone (if used) posting procedures [person(s) who will post Fumigant Treated Area and/or Buffer Zone (if used) signs, location of Fumigant Treated Area and/or Buffer Zone (if used) signs, procedures for Fumigant Treated Area and/or Buffer Zone (if used) sign removal].
- Plan describing how communication will take place between the applicator, land owner/operator, and other on-site handlers (e.g., tarp perforators/removers, irrigators) for complying with label requirements (e.g., timing of tarp perforation and removal, PPE, buffer zone location).
 - Name and phone number of persons contacted
 - Date contacted
- Authorized on-site personnel
 - Names, addresses and phone numbers of handlers
 - Names, addresses and phone numbers for employees of handlers
 - Tasks that each handler is authorized and trained to perform
 - For handlers designated to wear air-purifying respirators:
 - date of medical qualification to wear an air-purifying respirator
 - date of air-purifying respirator training, and
 - date of fit-testing for the air-purifying respirator.
- Air monitoring plan
 - If sensory irritation is experienced, indicate whether operations will be ceased or operations will continue with an air-purifying respirator
 - If the intention is to cease operations when sensory irritation is experienced, provide the name, address, and phone number of the handler that will perform monitoring activities prior to operations resuming
 - When air-purifying respirators are worn:
 - Representative handler tasks to be monitored
 - Monitoring equipment to be used and timing of monitoring
- Good Agricultural Practices (GAPs)
 - Description of applicable mandatory GAPs
 - Measurements and documentation to ensure GAPs are achieved (e.g., measurement of soil and other site conditions)
- Description of hazard communication. (The application block has been posted in accordance with the label. Non-handlers are excluded from the buffer zone. Pesticide product labels and material safety data sheets are on-site and readily available for employees to review.)
- Record-keeping procedures (the owner/operator of the application block as well as the Certified Applicator must keep a signed copy of the site-specific FMP for 2 years from the date of application).

For situations where an initial FMP is developed and certain elements do not change for multiple fumigation sites (e.g., applicator information, authorized on-site personnel, record-keeping procedures, emergency procedures) only elements that have changed need to be updated in the site-specific FMP provided the following:

- The Certified Applicator supervising the application has verified that those elements are current and applicable to the application block before it is fumigated.
- Record-keeping requirements are followed for the entire FMP (including elements that do not change).

Once the application begins, the Certified Applicator must make a copy of the FMP available for viewing by handlers involved in the fumigation. The Certified Applicator or the owner operator of the application block must provide a copy of the FMP to any local/state/federal/tribal enforcement personnel who request

the FMP. In the case of an emergency, the FMP must be made immediately available when requested by local/state/federal/tribal emergency response and enforcement personnel.

Within 30 days of completing the application portion of the fumigation process, the Certified Applicator supervising the application must complete a post-application summary that describes any deviations from the FMP that have occurred, measurements taken to comply with GAPs, monitoring results as well as any complaints and/or incidents that have been reported to him/her.

The Post-Application Summary must contain the following elements:

- Actual date of the application, application rate, and size of application block fumigated
- Summary of weather conditions on the day of the application and during the 48-hour period following the fumigant application
- Soil temperature measurement (if air temperatures were above 100° F in any of the 3 days prior to the application)
- Tarp damage and repair information (if applicable)
 - Location and size of tarp damage
 - Description of tarp/tarp seal/tarp equipment failure
 - Date and time of tarp repair
- Tarp perforation/removal details (if applicable)
 - Description of tarp removal (if different than in the FMP)
 - Date tarps were perforated
 - Date tarps were removed
- Vacating occupied structures within the buffer zone
 - Dates and times people left occupied structures within the buffer zone; and when they allowed them to return to such structures.
- Complaint details (if applicable)
 - Person filing complaint (e.g., on-site handler, person off-site)
 - If off-site person, name, address, and phone number of person filing complaint
 - Description of control measures or emergency procedures followed after complaint.
- Description of incidents, equipment failure or other emergency, and emergency procedures followed (if applicable)
- Details of elevated air concentrations monitored on-site (if applicable)
 - Location of elevated air concentration levels
 - Description of control measures or emergency procedures followed
 - Air monitoring results
 - When sensory irritation experienced:
 - Date and time of sensory irritation
 - Handler task/activity
 - Handler location where irritation was observed
 - Resulting action (e.g., cease operations, continue operations with air-purifying respirators)
 - When using a direct read instrument:
 - Sample date and time
 - Handler task/activity
 - Handler location
 - Air concentration
 - Sampling method
- Date of Fumigant Treated Area sign removal
- Date of Buffer Zone sign removal (if used)
- Any deviations from the FMP
- Record-keeping procedures (the owner/operator of the application block as well as the Certified Applicator must keep a signed copy of the post-application summary for 2 years from the date of application).

MANDATORY GOOD AGRICULTURAL PRACTICES (GAPs)

The following GAPs must be followed during all fumigant applications. All measurements and other documentation planned to ensure that the mandatory GAPs are achieved must be recorded in the FMP and/or post-application summary.

- MIDAS 33:67 must be transferred through connecting hoses, pipes, and/or couplings sufficiently tight to prevent workers or other persons from coming in contact with the liquid.
- All hoses, piping, and tanks used in connection with this product shall be of a type appropriate for use under the pressure and vacuum conditions to be encountered.
- Hoses between any fumigant container and the flow divider must be Teflon® hoses reinforced with stainless steel wire braid or its equivalent.
- External sight gauges, if applicable, shall be equipped with a valve so that pipes to sight gauge can be shut off in case of breakage or leakage.
- The mechanical transfer system must be adequate to make necessary measurements of the pesticide being used.
- Shut-off devices must be installed on the exit end of all cylinder connections and at all disconnect points to prevent leakage of product when the transfer is stopped and hose is removed or disconnected.
- The pressure in hoses used to move the product must not exceed the manufacturer's maximum pressure specifications.
- Check equipment to ensure good condition and integrity prior to each use.

Tarps (are required for all Midas 33:67 applications except for Tree Replant – Probe or Auger Applications). Tarps must be installed immediately after the fumigant is applied to the soil.

- A written tarp plan must be developed and included in the FMP. The plan must include:
 - schedule and procedures for checking tarps for damage, tears, and other problems
 - plans for determining when and how repairs to tarps will be made, and by whom
 - minimum time following injection that tarp will be repaired
 - minimum size of tarp damage that will be repaired
 - other factors used to determine how and when tarp repair will be conducted
 - schedule, equipment, and methods used to perforate tarps
 - aeration plans and procedures following perforation of tarp, but prior to tarp removal or planting/transplanting
 - schedule, equipment, and procedures for tarp removal

Weather Conditions

- Prior to fumigation the weather forecast for the day of the application and the 48-hour period following the fumigation must be checked to determine if unfavorable weather conditions exist (see **Identifying Unfavorable Weather Conditions** section) or are predicted and whether fumigation should begin.
- Wind speed at the application site must be a minimum of 2 mph at the start of the application or forecasted to reach at least 5 mph during the application.
- Do not apply if a shallow, compressed (low-level) temperature inversion is forecast to persist for more than 18 consecutive hours for the 48-hour period after the start of application, or if there is an air stagnation advisory issued by the National Weather Service in effect for the area in which the fumigation is planned.
- Detailed local forecasts for weather conditions, wind speed, and air stagnation advisories may be obtained on-line at: <http://www.nws.noaa.gov>, or by contacting your local National Weather Service Forecasting Office.
- **Identifying Unfavorable Weather Conditions** - Unfavorable weather conditions block upward movement of air, which results in trapping fumigant vapors near the ground. The resulting air mass can move off-site in unpredictable directions. These conditions typically exist prior to sunset and continue past sunrise and persist as late as noontime. Unfavorable conditions are

common on nights with limited cloud cover and light to no wind and their presence can be indicated by ground fog or smog and can also be identified by smoke from a ground source that flattens out below a ceiling layer and moves laterally in a concentrated cloud.

Soil Preparation

- Soil must be properly prepared and at the surface generally be free of large clods. The area to be fumigated must be tilled to a depth of at least 5 to 8 inches.
- Field trash must be properly managed. Residue from a previous crop must be worked into the soil to allow for decomposition prior to fumigation. Little or no crop residue shall be present on the soil surface. Crop residue that is present must not interfere with the soil seal. Removing the crop residue prior to fumigation is important to limit the natural "chimneys" that occur in the soil when crop residue is present. These "chimneys" allow the soil fumigants to move through the soil quickly and escape into the atmosphere. This may create potentially harmful conditions for workers and bystanders and limit the efficacy of the fumigant. However, crop residue on the field serves to prevent soil erosion from both wind and water and is an important consideration. To accommodate erosion control, fumigant efficacy, and human health protection, clear fields of crop residue as close to the timing of the fumigation as possible to limit the length of time that the soil would be exposed to potentially erosive weather conditions.

Prior to All Applications:

- Ensure that application equipment does not contain components made of natural rubber, aluminum, magnesium or their alloys.

During All Applications:

- Do not change cylinders when the fumigant system is under pressure. Change cylinders with all cylinder valves in the off position.

Following All Applications:

- To minimize the potential for crop injury, allow the fumigant to dissipate before planting a crop. Seeds may be used as a bioassay to determine if MIDAS 33:67 is present in the soil at concentrations sufficient to cause plant injury. See fumigation tables for planting requirements specific to the different application methods.
- Fumigation of highly acidic soils or those high in organic matter can cause ammonia toxicity to plants and or elevated levels of soluble salts in the soil causing phytotoxicity. Analyze soil following fumigation and fertilize as indicated. Avoid those fertilizers using ammonium salts.
- When using standard tarps, planting shall not occur for at least 10 days after application.
- When using highly retentive tarps, planting shall not occur for at least 14 days after application.

MANDATORY GOOD AGRICULTURAL PRACTICES (GAPs) FOR MIDAS 33:67 BEDDED AND BROADCAST SHANK APPLICATIONS

In addition to the GAPs required for all Midas 33:67 soil fumigation applications, the following GAPs apply for bedded and broadcast shank injection applications:

Soil Preparation

- Allow time for complete voiding of material in the buried shanks following the closure of the shutoff valve and before removing the shanks from the soil.
- In the event that trash is pulled up with the shanks after completing a treatment pass, the trash must be covered with the tarp and the edges of the tarp must be buried under at least 4 inches of compacted soil before making the next pass through the field.

Soil Temperature

- The soil temperature at the depth of injection must not be less than 55° F or exceed 90° F at the beginning of the application.
- If air temperatures have been above 100° F in any of the three days prior to application, then soil temperature must be measured and recorded in the FMP.

Soil Moisture

- The soil must be moist 9 inches below the surface. The amount of moisture needed will vary according to the soil type. Surface soil generally dries rapidly and must not be considered in this determination.
- Soil moisture must be determined by one of the following methods:
 - The USDA Feel and Appearance Method for testing, or
 - An instrument, such as a tensiometer.
- If there is insufficient moisture 9 inches below the surface, the soil moisture must be adjusted. If irrigation is not available and there is adequate soil moisture below 9 inches, soil moisture can be adjusted by discing or plowing before fumigant injection. To conserve existing soil moisture, pretreatment irrigation or pretreatment tillage should be done as close to the time of application as possible.
- Measure soil moisture at a depth of 9 inches at either end of the field, no more than 48 hours prior to application.

Soil moisture determination using the USDA Feel and Appearance Method

- For **coarse** textured soils (fine sand and loamy fine sand) there must be enough moisture (50 to 75 percent available soil water moisture/50 to 75 percent of field capacity) so the soil is moist, forms a weak ball with loose and clustered sand grains on fingers, darkened color, moderate water staining on fingers; will not ribbon.
- For **moderately coarse** textured soils (sandy loam and fine sandy loam) there must be enough moisture (50 to 75 percent available soil water moisture/50 to 75 percent of field capacity) so the soil is moist, forms a ball with defined finger marks, very light soil/water staining on fingers, darkened color will not stick.
- For **medium** textured soils (sandy clay loam, loam, and silt loam) there must be enough moisture (50 to 75 percent available soil water moisture/50 to 75 percent of field capacity) so the soil is moist, forms a ball, very light staining on fingers, darkened color, pliable, and forms a weak ribbon between the thumb and forefinger.
- For **fine** textured soils (clay, clay loam, and silty clay loam) there must be enough moisture (50 to 75 percent available soil water moisture/50 to 75 percent of field capacity) so the soil is moist, forms a smooth ball with defined finger marks, light soil/water staining on fingers, ribbons between thumb and forefinger.
- **For fields with more than one soil texture**, soil moisture content in the lightest textured (most sandy) areas must comply with this soil moisture requirement. Whenever possible, the field should be divided into areas of similar soil texture and the soil moisture of each area should be adjusted as needed. Coarser textured soils can be fumigated under conditions of higher soil moisture than finer textured soils; however, if the soil moisture is too high, fumigant movement will be retarded and effectiveness of the treatment will be reduced. Previous and/or local experience with the soil to be treated or the crop to be planted can often serve as a guide to conditions that will be acceptable. If there is uncertainty in determining the soil moisture content of the area to be treated, a local extension service agent, soil conservation service specialist, or pest control advisor (agriculture consultant) should be consulted for assistance.

Application Depth

- **For Tarped-Broadcast and Tarped-Bedded Applications:** The injection point must be a minimum of 6 inches from the nearest final soil/air interface. The application depth in preformed beds must not be below the bed furrow.

Prevention of End Row Spillage

- Do not apply or allow fumigant to spill onto the soil surface. For each injection line either have a check valve located as close as possible to the final injection point, or drain/purge the line of any remaining fumigant prior to lifting injection shanks from the ground.
- Do not lift injection shanks from the soil until the shut-off valve has been closed and the fumigant has been depressurized (passively drained) or purged (actively forced out via air compressor) from the system.

Calibration, Set-up, Repair and Maintenance for Application Rigs

- Brass, carbon steel or stainless steel fittings must be used throughout. Polyethylene tubing, polypropylene tubing, Teflon® tubing or Teflon®-lined steel braided tubing must be used for all low pressure lines, drain lines, and compressed gas or air pressure lines. All other tubing must be Teflon®-lined steel braided.
- Galvanized, PVC, nylon or aluminum pipe fittings must not be used.
- All rigs must include a filter to remove any particulates from the fumigant, and for pressurized systems, a check valve to prevent backflow of the fumigant into the pressurizing cylinder or the compressed air system
- Rigs must include a flowmeter or a constant pressure system with orifice plates to insure the proper amount of fumigant is applied.
- To prevent the backflow of fumigant into the compressed gas cylinder (e.g., nitrogen, other inert gas, compressed air), if used, applicators must:
 - When applying MIDAS 33:67 from steel cylinders using compressed gas, ensure that positive pressure is maintained in the cylinder at not less than 80 psi during the entire time it is connected to the application rig, (*This is not required for a compressed air system that is part of the application rig because if the compressor system fails the application rig will not be operable*).
 - When applying MIDAS 33:67 from drum-in-drum poly-totes, using compressed gas, maintain a positive pressure of not less than 35 psi during the entire time it is connected to the application rig. (*This is not required for a compressed air system that is part of the application rig because if the compressor system fails the application rig will not be operable*).
 - Ensure that application rigs are equipped with properly functioning check valves between the compressed gas cylinder or compressed air system and the fumigant cylinder. The check valve is best placed on the outlet side of the pressure regulator, and is oriented to only allow compressed gas to flow out of the cylinder or compressed air out of the compressed air system.
 - Always pressurize the system with compressed gas or by use of a compressed air system before opening the fumigant cylinder valve.
- Before using a fumigation rig for the first time, or when preparing it for use after storage, the operator must check the following items carefully:
 - Check the filter, and clean or replace the filter element as required.
 - Check all tubes and chisels to make sure they are free of debris and obstructions.
 - Check and clean the orifice plates and screen checks, if installed.
 - Pressurize the system with compressed gas or compressed air, and check all fittings, valves, and connections for leaks using soap solution.
- Install the fumigant cylinder, and connect and secure all tubing. Slowly open the compressed gas or compressed air valve, and increase the pressure to the desired level. Slowly open the fumigant cylinder valve, always watching for leaks.
- When the application is complete, close the fumigant cylinder valve and blow residual fumigant out of the fumigant lines into the soil using compressed gas or compressed air. At the end of the application, disconnect all fumigant cylinders from the application rig. At the end of the season, seal all tubing openings with tape to prevent the entry of insects and dirt.

Application equipment must be calibrated and all control systems must be working properly. Proper calibration is essential for application equipment to deliver the correct amount of fumigant uniformly to the soil. Refer to the manufacturer's instructions on how to calibrate your equipment, usually the equipment manufacturer, fumigant dealer, or Cooperative Extension Service can provide assistance.

Soil Sealing

Raised Bed Applications

- Use tractor mounted chisels spaced no more than 12 inches apart. Injections spacing of 12 inches or less is typically performed with a multiple shank applicator. The treated ground must be sealed using either:

- Soil sealing at the time of application: The treated ground must be sealed using closing shoes, roller, compaction roller, cultipacker, or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarp (with fumigant injection) by tarp-laying equipment mounted on the application tractor; or
- Bed shaper: The chisels shall be placed with the injection point under the bed shaper, and the tarp shall be laid down simultaneously (with fumigant injection) by tarp-laying equipment mounted on the application tractor; or
- Combination bed former and bed shaper: The chisels shall be placed between the bed former and the bed shaper. The tractor with the tarp-laying equipment shall immediately follow the application tractor.

Broadcast/Flat Fume Applications

- Use tractor mounted chisels spaced no more than 12 inches apart.
- Soil sealing at time of application: The treated ground must be sealed using closing shoes, roller, compaction roller, cultipacker or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarp (with fumigant injection) by tarp-laying equipment mounted on the application tractor.

TREE REPLANT – PROBE OR AUGER APPLICATION: MANDATORY GAPs

This application method is used when MIDAS 33:67 is applied to individual tree sites in an existing orchard where shank applications are not possible.

In addition to the GAPs required for all MIDAS 33:67 soil fumigation applications, the following GAPs apply for MIDAS 33:67 tree replant – probe or auger applications:

Site Preparation

- Remove the tree stump and primary root system in each individual tree-site with a back-hoe or other similar equipment, for example an auger.
- The hole must be backfilled with soil before application.

Application Depth

- The fumigant must be injected at least 18 inches into the soil, typically between 18 and 36 inches.

System Flush

- Before removing the application wand from the soil the wand must be cleared using nitrogen or compressed air.

Soil Sealing

- After the wand is cleared and removed from the soil, the injection hole must be either covered with soil and tamped; or the soil must be compacted over the injection hole.

MIDAS 33:67 PRE-PLANT FIELD FUMIGATION METHODS

Fumigation with MIDAS 33:67 shall only be performed in accordance with the following three application techniques: 1) Raised Bed Application, 2) Broadcast/Flat Fume Application, or 3) Tree Replant – Probe or Auger Application (stone fruit, nut trees, vines, and field-grown ornamentals only). Application methods and rates of application for each of these methods are discussed in detail below.

Application Rates for Raised Bed Fumigation: Rates in the table below are given in pounds of MIDAS 33:67 per broadcast acre. The amount of product applied will be proportionate to the row spacing and width of the raised bed. To calculate the amount of product to be applied, multiply the application rate in

lbs MIDAS 33:67/broadcast acre by the appropriate modifier from the Field Rate Modifier Table provided below.

RAISED BED SOIL FUMIGATION TABLE		
Crop	MIDAS 33:67 Per Broadcast Acre ¹	Time Between Application and Planting ²
Field-Grown Ornamentals Peppers Strawberries Tomatoes	Standard Tarps 300 - 520 lbs/Broadcast Acre (19.9 - 34.4 gal/Broadcast Acre)	10 - 14 days
	Highly Retentive Tarps³ 175-250 lbs/Broadcast Acre 11.6 - 16.6 gal/Broadcast Acre	14 - 21 days when using highly retentive tarps
NOTE: ¹ For fields infested with nutsedge and Malva, apply a minimum of 450 lbs/broadcast acre (29.8 gal/acre) of MIDAS 33:67 with standard tarps and 250 lbs/broadcast acre (16.6 gal/acre) with highly retentive tarps. ² Use the longer planting restriction period under conditions of high soil moisture, heavy soils, or rain. ³ Contact your Arysta LifeScience representative for tarp selection and rate reduction recommendations and approved tarps.		

Field Rate Modifier Table for Raised Bed Applications

Row Spacing (inches)	Bed Width (inches)	Field Rate Modifier
72	40	0.55
72	36	0.50
72	32	0.44
72	30	0.42
72	28	0.39
66	32	0.48
66	30	0.45
66	28	0.42
66	24	0.36
60	30	0.50
60	28	0.47
48	28	0.58

APPLICATION RATES FOR BROADCAST / FLAT FUME FUMIGATION WITH STANDARD TARPS

Crop	MIDAS 33:67 Per Acre¹	Time Between Application and Planting
Field-Grown Ornamentals Peppers Strawberries Tomatoes Turf	300 – 520 lbs/Acre (19.9 – 34.4 gal/Acre)	10 – 14 days
Stone Fruits (Apricot, Sweet Cherry, Tart Cherry, Nectarine, Peach, Plum, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot, Fresh Prune) Tree Nuts (Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (Hazelnut), Hickory Nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Black Walnut, English Walnut) Vines (Table, Raisin and Wine Grape)	360- 520 lbs/Acre (23.8 – 34.4 gal/Acre)	10 – 14 days
Nurseries (including strawberries, stone fruits, tree nuts and conifer trees)	520 lbs/Acre (34.4 gal/Acre)	10 – 14 days

NOTE:

¹ For fields infested with nutsedge and Malva apply a minimum of 300 lbs/acre (19.9 gal/acre) of MIDAS 33:67.

Application Rates for Broadcast/Flat Fume Fumigation with Highly Retentive Tarps

Contact your Arysta LifeScience North America representative for information on approved tarps and rate reduction recommendations for highly retentive tarps. Applications using highly retentive tarps shall not exceed 300 lbs/Acre (19.9 gal/Acre).

Tree Replant – Probe or Auger Application:

For Stone Fruit Trees, Tree Nuts, Vines, and Field Grown Ornamental Trees and Shrubs, use 2 lbs of MIDAS 33:67 per injection site. Use 1 injection site per 100 square feet (i.e., one injection site every 10 feet in a standard grid pattern). Planting or replanting of Stone Fruit Trees, Tree Nuts, Vines, and Field-Grown Ornamental Trees and Shrubs may begin 14 days after treatment. DO NOT PLANT if the odor of chloropicrin is detectable.

Do not treat more than 230 trees/shrubs/vines per acre per day.

ROTATIONAL CROPS

Food crops other than strawberry, tomatoes, and peppers require a 4 month plant back rotation restriction from the date of fumigant application. Crop rotation to non-food crops or non-bearing fruit or nut trees is not restricted.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store in a dry, cool, well-ventilated area under lock and key. When appropriate to prevent tipping, store cylinders upright, secured to a rack or wall. Post as a pesticide storage area.

Handling: Product cylinders shall not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging or sliding. Do not use rope slings, hooks, tongs, or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured.

Do not remove valve protection bonnet and safety cap until immediately before use. When cylinder is not in use, close valve by turning clockwise until hand tight, screw safety cap onto valve outlet, and replace protection bonnet.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Return of Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

This pesticide container, whether full or partially used, is the property of the manufacturer or distributor where it was purchased and must be returned to the distributor of origin. Do not ship containers without safety caps or valve protection bonnets. Containers shall never be refilled by the consumer or used for any other product or purpose.

FOR 24-HOUR CHEMICAL EMERGENCY (spill, leak, fire or accident) ASSISTANCE:

Call CHEMTREC at 1-800-424-9300

Warranty and Disclaimer Statement

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America, LLC ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF

ARYSTA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF ARYSTA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT ARYSTA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.

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**RESTRICTED USE PESTICIDE
DUE TO ACUTE TOXICITY**

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

MIDAS® 33:67

FOR SALE AND USE IN STATES OTHER THAN FLORIDA

Only For Pre-Plant Fumigations of Fields Intended for Commercial Production of Listed Crops and Field-Grown Ornamentals, for the Control of Soil-Borne Pests Including Weed Seeds, Nematodes, Insects, and Diseases.

ACTIVE INGREDIENTS:

Iodomethane.....32.93%
Chloropicrin66.67%
OTHER INGREDIENTS: 0.40%
TOTAL:..... 100.00%
One gallon weighs 15.1 pounds (5 pounds Iodomethane and 10.1 pounds Chloropicrin).

**KEEP OUT OF REACH OF CHILDREN
DANGER / PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail).

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person.
<p>HOT LINE NUMBERS</p> <p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p> <p>FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL: 1-866-303-6952 or 1-651-632-8946</p>	
<p>NOTE TO PHYSICIAN</p> <p>Probable mucosal damage may contraindicate the use of gastric lavage. Symptoms of overexposure may include irritation to eyes, skin, and respiratory system, shortness of breath, nausea, vomiting, dizziness, ataxia, slurred speech, drowsiness, blurred vision, staggering gait and mental imbalance, with probable recovery after period of no exposure. Treatment is symptomatic.</p>	

In EPA Letter Dated:

6/8/2010

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 6330-59

EPA Reg. No. 66330-59
EPA Est. No.

For Product Information Call: 1-866-761-9397

Net Contents: _____ LBS.

Manufactured for
Arysta LifeScience North America, LLC
15401 Weston Parkway, Suite 150
Cary, NC 27513

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

Danger. Corrosive. Causes irreversible eye damage. Corrosive to skin. Causes skin burns. May be fatal if inhaled or swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin or on clothing. Do not breathe vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SPECIAL NOTE: This product contains chloropicrin, a poisonous liquid or vapor. Inhalation of vapors may be fatal. Chloropicrin is readily identified by smell. Exposure to very low concentrations of vapor will cause irritation of eyes, nose and throat. Continued exposure after irritation is evident or higher concentrations may cause painful irritation to the eyes or temporary blindness. Liquid will cause chemical burns to skin or eyes. Do not get on skin, in eyes, or on clothing. Chloropicrin fumigant has the capacity to cause marked irritation to the upper respiratory tract and is a strong lachrymator (tear producing eye irritant). Low concentrations, below those necessary to cause serious systemic intoxication, are capable of causing severely painful eye irritation, hence will not be voluntarily tolerated. However, the effect may be so powerful that a person may become temporarily blinded and panic-stricken and that in turn may lead to accidents.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminate or viton ≥ 14 mils. For more options, follow the instructions for category H on the chemical-resistance category selection chart.

All Handlers (including applicators) while performing tasks with liquid contact potential (including, but not limited to, supervisors, loaders, tractor drivers, and persons involved with spill recovery, container disposal, and equipment repair when within arm's length proximity and handling, adjusting or securing charged/pressurized lines, supply tubing, cylinders/tanks and other delivery equipment that contains liquid fumigant when cylinder/tank valves are in the open position) **must wear:**

- Loose fitting or well ventilated long-sleeved shirt and long pants,
- Chemical-resistant gloves,
- Chemical-resistant apron,
- Chemical-resistant footwear and socks,
- Full face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles, and
- A half face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C).
- In addition, if sensory irritation (tearing, burning, of the eyes or nose) is experienced while wearing a half-face air-purifying respirator, handlers must wear at a minimum a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C). See Directions for Use, Protection for Handlers, Respiratory Protection

and Stop Work Triggers, number 1: *Handlers Wearing Half-Face Air-Purifying Respirators*, for when a full-face respirator is required.

All Handlers (including applicators) present in either the application block (i.e., a field or portion of a field treated with a fumigant in any 24-hour period) until 5 days (120 hours) after the application is complete (i.e., after tarps have been laid) or the buffer zone during the buffer zone period (to include supervisors, tractor drivers, co-pilots, shovelers, cross ditchers, and tarp monitors) (see exception for transient travel in the Buffer Zone section) must wear:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles.
- A half face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C).
- In addition, if sensory irritation (tearing, burning, of the eyes or nose) is experienced while wearing a half-face air-purifying respirator, handlers must wear at a minimum a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C). See Directions for Use, Protection for Handlers, Respiratory Protection and Stop Work Triggers, number 1: *Handlers Wearing Half-Face Air-Purifying Respirators*, for when a full-face respirator is required.
- For tractor drivers and tractor co-pilots the following can be used in lieu of an air-purifying respirator:
 - A tractor equipped with a working-area air-fan dilution system consisting of a ducted fan/blower which provides air flow to the breathing zone of the tractor driver and co-pilot. The fan/blower must be mounted so that the fan/blower intake is at least 126 inches from the ground, and the fan/blower must be capable of operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.
 - See Directions for Use, Protection for Handlers, Respiratory Protection and Stop Work Triggers, number 2: *Air-Fan Dilution Equipment*, for when a full-face respirator is required.
- Do not wear jewelry, gloves, goggles, tight clothing, rubber protective clothing, or rubber boots when handling. Iodomethane and chloropicrin are heavier than air and can be trapped inside clothing and cause skin injury.

All Handlers (including applicators) present in the application block (i.e., a field or portion of a field treated with a fumigant in any 24-hour period) 5 days (120 hours) after the application is complete (i.e., after tarps have been laid) until the entry restricted period expires (to include planters, hole punchers, tarp cutters, tarp removers, tarp remover drivers, and persons involved with tarp and irrigation repair, air monitoring, scouting/crop advising) must wear:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles.
- In addition, if sensory irritation (tearing, burning, of the eyes or nose) is experienced, handlers must wear at a minimum a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C). See Directions for Use, Protection for Handlers, Respiratory Protection and Stop Work Triggers, number 3: *Handlers in the Application Block 5 days (120 hours) after the Application is Complete until the Entry Restricted Period Expires*, for when a full-face respirator is required.
- Do not wear jewelry, gloves, goggles, tight clothing, rubber protective clothing, or rubber boots when handling. Iodomethane and chloropicrin are heavier than air and can be trapped inside clothing and cause skin injury.

IMPORTANT: an air-supplying respirator [i.e., a respirator connected directly to a clean air source or a self-contained breathing apparatus (SCBA)] is not permitted for routine handler tasks. Such respirators are only permitted in emergencies such as a spill or leak or when corrective action is needed to reduce air levels to acceptable levels.

User Safety Requirements

- Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.
- Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing and gloves, if worn, immediately if pesticide gets inside, then wash skin thoroughly and put on clean clothing and gloves, if worn.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to mammals and birds. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate. Iodomethane and chloropicrin have certain properties and characteristics in common with chemicals that have been detected in ground water (iodomethane and chloropicrin are highly soluble in water and have low adsorption to soil).

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat, open flames, or sparking electrical equipment. Do not use application devices containing natural rubber, aluminum, magnesium or their alloys.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during the application.

For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), restricted entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

For the entry restricted period and notification requirements, see the **Entry Restricted Period and Notification** sections of this labeling.

PPE for Entry During the Entry Restricted Period: PPE for entry that is permitted by this labeling is listed in the Hazards to Humans and Domestic Animals section of this labeling.

HANDLERS

The following activities are prohibited from being performed in the application block (i.e., the field or portion of a field treated with a fumigant in any 24-hour period) by anyone other than persons who have been appropriately trained and equipped as handlers in accordance with the requirements in the Worker Protection Standard (40 CFR Part 170), from the start of the application until the entry restricted period ends (NOTE: persons installing, perforating, removing, repairing, and monitoring tarps are considered handlers for the durations listed below). Those activities include those persons:

- Participating in the application as supervisors, loaders, drivers, tractor co-pilots, shovelers, cross ditchers, or as other direct application participants (the application starts when the fumigant is first introduced into the soil and ends after the fumigant has stopped being delivered/dispensed to the soil);
- Using devices to take air samples to monitor fumigant air concentrations;
- Cleaning up fumigant spills (this does not include emergency personnel not associated with the fumigation application);
- Handling or disposing of fumigant containers;
- Cleaning, handling, adjusting, or repairing the parts of fumigation equipment that may contain fumigant residues;
- Installing, repairing, operating, or removing irrigation equipment in the fumigant application block;
- Entering the application site to perform scouting, crop advising, or monitoring tasks;
- Installing, perforating (cutting, punching, slicing, poking), removing, repairing, or monitoring tarps:
 - until 14 days after application is complete if tarps are not perforated and removed during those 14 days, or
 - until tarp removal is complete if tarps are **both** perforated **and** removed less than 14 days after application, or
 - until 48 hours after tarp perforation is complete if they will not be removed within 14 days after application.

NOTE: see Tarp Perforation and/or Removal section on this labeling for requirements about when tarps are allowed to be perforated.

- Performing any handling tasks as defined by the WPS.

PROTECTION FOR HANDLERS

Respiratory Protection and Stop Work Triggers

1. Handlers Wearing Half-Face Air-Purifying Respirators

The following procedures must be followed to determine whether a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent, is required or if operations must cease for handlers wearing a half-face air-purifying respirator:

- If at any time any handler experiences sensory irritation (tearing, burning of the eyes or nose) while wearing a half-face air-purifying respirator:

- A full-face air-purifying respirator must be worn by all handlers who remain in the application block and/or buffer zone, **or**
- Operations must cease and handlers not wearing full-face air-purifying respirators must leave the application block and/or buffer zone.
- When full-face air-purifying respirators are worn, then air-monitoring samples for chloropicrin must be collected at least every 2 hours in the breathing zone of a handler performing a representative handling task.
- When using monitoring devices to monitor air concentration levels, a direct reading detection device, such as a Matheson-Kitagawa, Dräger, or Sensidyne device must be used. The devices must have a sensitivity of at least 0.15 ppm for chloropicrin.
- When breathing zone samples are required, they must be taken outside respiratory protection equipment and within a ten inch radius of the handler's nose and mouth.
- If at any time (1) a handler experiences any sensory irritation when wearing a full-face air-purifying respirator; or (2) an air sample is greater than or equal to 1.5 ppm, then all handler activities must cease and handlers must be removed from the application block and buffer zone. If operations cease, the emergency plan detailed in the FMP must be implemented.
- Handlers can remove full-face air-purifying respirators or resume work activities if all of the following conditions exist provided that a half-face air-purifying respirator is worn:
 - Two consecutive breathing zone samples for chloropicrin taken at the handling site at least 15 minutes apart must be less than 1.5 ppm;
 - Handlers do not experience sensory irritation; and
 - Air-purifying respirator cartridges have been changed.
 - During the collection of air samples a full-face air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.

2. Air Fan Dilution Equipment

The following procedures must be followed to determine whether a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent, is required or if operations must cease for tractor drivers and tractor co-pilots using a tractor equipped with a working-area air-fan dilution system:

- If at any time tractor drivers and/or tractor co-pilots experience sensory irritation (tearing, burning of the eyes or nose) then either:
 - A full-face air-purifying respirator must be worn by all tractor drivers and tractor co-pilots who remain in the application block and/or buffer zone **or**
 - Operations must cease and tractor drivers and tractor co-pilots not wearing respiratory protection must leave the application block and/or buffer zone.
- When full-face air-purifying respirators are worn, then air monitoring samples must be collected at least every two hours in the breathing zone of a representative tractor driver or tractor co-pilot.
- When using monitoring devices to monitor air concentration levels, a direct reading detection device, such as a Matheson-Kitagawa, Dräger, or Sensidyne device, must be used. The devices must have a sensitivity of at least 0.15 ppm for chloropicrin.
- When breathing zone samples are required, they must be taken outside respiratory protection equipment and within a ten inch radius of the handler's nose and mouth.
- Tractor drivers and co-pilots can resume work activities without full-face air-purifying respirators if all of the following conditions exist:
 - Two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show levels of chloropicrin have decreased to less than 0.15 ppm;
 - Tractor drivers and tractor co-pilots do not experience sensory irritation; and
 - The air-fan dilution system is operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.
 - During the collection of air samples a full-face air purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.
- If at any time (1) a tractor driver and/or tractor co-pilot experiences any sensory irritation when wearing a full-face air-purifying respirator, or (2) an air sample is greater than or equal to 1.5 ppm,

then all activities must cease and tractor drivers and tractor co-pilots must be removed from the application block and/or buffer zone. If operations cease, the emergency plan detailed in the FMP must be implemented.

- Work activities can resume if all of the following conditions exist provided that a full-face air-purifying respirator is worn:
 - Two consecutive chloropicrin breathing zone samples taken at the handling site at least 15 minutes apart must be less than 1.5 ppm, but are greater than 0.15 ppm;
 - Tractor drivers and tractor co-pilots do not experience sensory irritation while wearing the full-face air-purifying respirator;
 - Respirator cartridges have been changed; and
 - The air-fan dilution system is operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.
 - During the collection of air samples, a full-face air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.

3. Handlers in the Application Block 5 days (120 hours) after the Application is Complete until the Entry Restricted Period Expires

The following procedures must be followed to determine whether a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent, is required or if operation must cease for handlers in the application block after the application is complete

- If at any time any handler experiences sensory irritation (tearing, burning of the eyes or nose) then either:
 - A full-face air-purifying respirator must be worn by all handlers who remain in the application block **or**
 - Operations must cease and handlers not wearing respiratory protection must leave the application block.
- Handlers can remove full-face air-purifying respirators or resume operations if two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show that levels of chloropicrin have decreased to less than 0.15 ppm provided that handlers do not experience sensory irritation. During the collection of air samples, a full-face air-purifying respirator must be worn by the handler taking air samples. Samples must be taken where the sensory irritation is first experienced.
- When using monitoring devices to monitor air concentration levels, a direct reading detection device, such as a Matheson-Kitagawa, Dräger, or Sensidyne device, must be used. The devices must have a sensitivity of at least 0.15 ppm for chloropicrin.
- When breathing zone samples are required, they must be taken outside respiratory protection equipment and within a ten inch radius of the handler's nose and mouth.
- When full-face air-purifying respirators are worn, then air monitoring samples must be collected at least every two hours in the breathing zone of a handler performing a representative handling task.
- If at any time (1) a handler experiences any sensory irritation when wearing a full-face air-purifying respirator, or (2) an air sample is greater than or equal to 1.5 ppm, then all handler activities must cease and handlers must be removed from the application block. If operations cease, the emergency plan detailed in the FMP must be implemented.
- Handlers can resume work activities without full-face air-purifying respirators if two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show levels of chloropicrin have decreased to less than 0.15 ppm, provided that handlers do not experience sensory irritation. During the collection of air samples a full-face air purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.
- Work activities can resume if all of the following conditions exist provided that a full-face air-purifying respirator is worn:
 - Two consecutive chloropicrin breathing zone samples taken at the handling site at least 15 minutes apart must be less than 1.5 ppm, but are greater than 0.15 ppm;

- Handlers do not experience sensory irritation while wearing the full-face air-purifying respirator; and
- Cartridges have been changed.
- During the collection of air samples, a full-face air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.

Supervision of Handlers

For all applications: From the start of the application until the fumigant has stopped being delivered/dispensed into the soil, i.e., after the soil is sealed, an Arysta trained and state certified applicator must be at the fumigation site in the line of sight of the application and must directly supervise all persons performing handling activities.

For handling activities that take place after the fumigant has been delivered/dispensed into the soil until the entry restricted period expires, the Certified Applicator does not have to be on-site, but must have communicated, in a manner that can be understood, to the site owner/operator and handlers responsible for carrying out those activities the information necessary to comply with the label and procedures described in the FMP (e.g., emergency response plans and procedures). Communication activities must be captured in the FMP.

IMPORTANT: This requirement does not override the requirements in the Worker Protection Standard for Agricultural Pesticides for information exchange between owners/operators of agricultural establishments and commercial pesticide applicators.

The Certified Applicator must provide **Fumigant Safe Handling** information to each handler involved in the application or confirm that each handler participating in the application has received **Fumigant Safe Handling** information in the past 12 months. **Fumigant Safe Handling** information will be provided where the product is purchased, or at (insert EPA website).

For all handling tasks at least two handlers trained under the provisions of the WPS 40 CFR 170.230 must be present.

Respirator Fit Testing, Medical Qualification and Training

Employers must verify that any handler who uses a respirator is:

- Fit-tested and fit-checked using a program that conforms to OSHA's requirements (see 29 CFR Part 1910.134)
- Trained using a program that conforms to OSHA's requirements (see 29 CFR Part 1910.134)
- Examined by a qualified medical practitioner to ensure physical ability to safely wear the style of respirator to be worn. A qualified medical practitioner is a physician or other licensed health care professional who will evaluate the ability of a worker to wear a respirator. The initial evaluation consists of a questionnaire that asks about medical conditions (such as a heart condition) that would be problematic for respirator use. If concerns are identified, then additional evaluations, such as a physical exam, might be necessary. The initial evaluation must be done before respirator use begins. Handlers must be reexamined by a qualified medical practitioner if their health status or respirator style or use-conditions change. Upon request by local/state/federal/tribal enforcement personnel, employers must provide documentation demonstrating how they have complied with these requirements.

Providing, Cleaning and Maintaining PPE

The employer of any handler (as stated in this label) must make sure that all handlers are provided and correctly wear the required PPE. The PPE must be cleaned and maintained as required by the Worker Protection Standard for Agricultural Pesticides.

Air-Purifying Respirator Availability

At a minimum two handlers must have the appropriate air-purifying respirator and cartridges available and these handlers must be fit-tested, trained and medically examined.

The employer of any handler must confirm that an air-purifying respirator and appropriate cartridges of the type specified in the PPE section of this labeling are immediately available for each handler who will wear one. This must be documented in the FMP.

Cartridges or canisters must be replaced when odor or irritation from this product becomes apparent, if the measured concentration of chloropicrin is greater than or equal to 1.5 ppm, or after 8 hours of use, whichever occurs first.

Air-Rescue Device Availability

The employer of any handler must confirm that at least one air-rescue device (e.g., SCBA) is on-site and is ready for use in case of an emergency. This must be documented in the FMP.

Exclusion of Non-Handlers from Application Block:

The Certified Applicator supervising the application and the owner/operator of the establishment where the fumigation is taking place must make sure that all persons who are not trained and PPE-equipped and who are not performing one of the handling tasks as stated in this labeling are excluded from the application block during the entry restricted period and from the buffer zone during the buffer zone period.

Entry Restricted Period

Entry (including early entry that would otherwise be permitted under the WPS) by any person, other than a correctly trained and PPE-equipped handler who is performing a handling task listed on this labeling, is PROHIBITED from the start of the application until:

- 5 days (120 hours) after the application is complete for untarped applications, or
- 5 days (120 hours) after application is complete if tarps are not perforated and removed for at least 14 days following application, NOTE: Persons installing, repairing, or monitoring tarps are handlers until 14 days after the application is complete if tarps are not perforated and removed during those 14 days, or
- 48 hours after tarp perforation is complete if tarps will not be removed for at least 14 days following application, or
- Until tarp removal is completed if tarps are both perforated and removed less than 14 days after application.

NOTE: See **Tarp Perforation and/or Removal** section on this labeling for requirements about when tarps are allowed to be perforated.

Notification

Notify workers of the application by warning them orally and by posting Fumigant Treated Area signs. The Fumigant Treated Area signs must bear the skull and crossbones symbol and state:

- (1) "DANGER/PELIGRO"
- (2) "Areas under fumigation, DO NOT ENTER/NO ENTRE"
- (3) Iodomethane/Chloropicrin Fumigant In Use
- (4) Date and time of fumigation
- (5) Date and time entry restricted period is over
- (6) MIDAS 33:67, and
- (7) Name, address, and telephone number of the Certified Applicator in charge of the fumigation.

Post the Fumigant Treated Area sign instead of the WPS sign for this application but follow all WPS requirements pertaining to location, legibility, size and timing of posting and removal.

Post the Fumigant Treated Area signs at all entrances to the application block (i.e., the field or portion of a field treated with a fumigant in any 24-hour period.)

Tarp Perforation and/or Removal

IMPORTANT: Persons perforating, repairing, removing, and/or monitoring tarps are defined, within certain time limitations, as handlers (see handlers as stated in this labeling) and must be provided the PPE and other protections for handlers as required on this labeling and in the Worker Protection Standard for Agricultural Pesticides.

- Standard tarps must not be perforated until a minimum of 5 days (120 hours) have elapsed after the fumigant injection into the soil is complete (e.g., after tarps have been laid), unless a weather condition exists which necessitates early perforation or removal, see **Early Tarp Removal for Broadcast Applications Only** and **Early Tarp Perforation for Flood Prevention Activities** sections. Highly retentive tarps (on an Arysta approved list) must not be perforated until a minimum of 10 days (240 hours) have elapsed after the fumigation injection into the soil is complete.
- If tarps will be removed before planting, tarp removal must not begin until at least 2 hours after tarp perforation is complete.
- If tarps will not be removed before planting, planting or transplanting must not begin until at least 48 hours after the tarp perforation is complete.
- If tarps are left intact for a minimum of 14 days after fumigant injection into the soil is complete, planting or transplanting may take place while the tarps are being perforated.
- Each tarp panel used for broadcast fumigation must be perforated.
- Tarps used for fumigations may be perforated manually **ONLY** for the following situations:
 - At the beginning of each row when a coulter blade (or other device which performs similarly) is used on a motorized vehicle such as an ATV.
 - In fields that are 1 acre or less.
 - During flood prevention activities.
- In all other instances tarps must be perforated (cut, punched, poked, or sliced) only by mechanical methods.
- Tarp perforation for broadcast fumigations must be completed before noon.
- For broadcast fumigations, tarps must not be perforated if rainfall is expected within 12 hours.
- **Early Tarp Removal for Broadcast Applications Only:**
 - Tarps may be removed before the required 5 days (120 hours) or 10 days (240 hours) if adverse weather conditions have compromised the integrity of the tarp, provided that the compromised tarp poses a safety hazard. *Adverse weather* includes high wind, hail, or storms that blow tarps off the field and create a hazard, e.g., tarps blowing into power lines and onto roads. A *compromised tarp* is a tarp that due to an adverse weather condition is no longer performing its intended function and is creating a hazard.
 - If tarps are removed before the required 5 days (120 hours) or 10 days (240 hours) have elapsed due to adverse weather, the events must be documented in the post-application summary.
- **Early Tarp Perforation for Flood Prevention Activities**
 - Tarp perforation is allowed before the 5 days have elapsed.
 - Tarps must be immediately retucked and packed after soil removal.

Buffer Zone

The area adjacent to the treated area is referred to as the buffer zone. The buffer zone shall extend from the edge of the treated area in all directions. See Buffer Zone Table. The minimum buffer zone distance shall be 25 feet.

The Certified Applicator supervising the soil fumigation is responsible for the following:

1. Calculating the appropriate size of the buffer zone that must be maintained from the start of the application until 48 hours following the end of the application;
2. Establishing and maintaining the buffer zone from the start of the application until 48 hours following the end of the application. The Certified Applicator must use an appropriate means to manage and maintain the buffer zone such as posting Buffer Zone signs around the perimeter of the buffer zone at potential points of entry, using trained workers to patrol the buffer zone, or

other equivalent means. If Buffer Zone signs are used, they must be posted from the start of the application until 48 hours following the end of the application and must be removed within 3 days of the end of the buffer zone period. The Buffer Zone signs must include the same warning symbol and statements required for Fumigant Treated Area signs as stated on this label with the exception that signs will indicate "Fumigant Buffer Zone" at the top of the sign and will delete the statement "areas under fumigation".

3. Ensuring that unprotected workers and bystanders do not enter the buffer zone from the start of the application until 48 hours following the end of the application. Exception: Unprotected workers and bystanders may travel through (but not engage in any activity in) the buffer zone during the application and the 48-hour period following the end of the application, provided their total exposure time in any 24-hour period is 15 minutes or less. However, travel by unprotected workers or bystanders through the fumigated area itself is prohibited during the entire Entry Restricted period. Handlers protected with required Personal Protective Equipment (PPE) may work in buffer zones. See the PERSONAL PROTECTIVE EQUIPMENT section.
4. Ensuring application site has a distinctive buffer zone. The buffer zone of the field to be treated cannot overlap the buffer zone of another field treated within the last 48 hours.
5. Ensuring that there are no occupied nursing homes, hospitals, or prisons; and no occupied licensed schools, licensed day care facilities and licensed assisted living facilities (licensed by state or local governments) within $\frac{1}{4}$ mile of the fumigated area during the buffer zone period.

Determining Buffer Zone Distance

- Determine the size of the buffer zone using the following Buffer Zone Table.
- The size of the buffer zone will be dependent on the following three factors:
 - The number of field acres that are being treated with MIDAS 33:67.
 - The pounds of MIDAS 33:67 that are being applied per treated acre.
 - Buffer zone reduction credits.

Buffer Zone Table

MIDAS 33:67 Application Rate (Lbs per Treated Acre) ⁴	SIZE OF FIELD IN ACRES (Buffer zone distance in feet) ^{1,2}							
	Up to 5 Acres	6 – 10 Acres	11-15 Acres	16- 20 Acres	21-25 Acres	26-30 Acres	31-35 Acres	36-40 ³ Acres
100	25	25	45	60	70	80	90	95
150	25	30	60	85	100	115	130	145
175	25	35	70	100	120	135	150	165
200	25	40	80	115	135	155	175	190
250	25	50	95	140	165	190	215	235
300	30	60	115	170	200	230	260	285
350	35	70	135	200	235	265	300	330
360	35	70	140	205	240	275	310	340
400	40	75	150	225	265	305	345	380
500	50	95	190	285	335	380	430	475
520	50	100	200	300	350	400	450	500

1. For rates not listed on this table, use the buffer zone for the next highest rate, or use the following calculation to determine the exact buffer zone:

$$\text{Buffer Zone for Application Rate Not Listed} = \frac{\text{Known Buffer Zone on Table} \times \text{Application Rate Not Listed}}{\text{Rate of Application for Known Buffer Zone}}$$

2. Buffer Zone Reduction Credits:

Reduce buffer zone by 10% for each factor listed below:

- Use of flat fume/broadcast application
- Use of highly retentive films. Highly retentive films for which credit can be applied must be on an Arysta approved list. Examples of Arysta approved films are Canslit Brand Metalized 1.3 mil, Pliant Blockade® VIF 1.25 mil, or Pliant Metalized 1.0-1.25.
- Application to soils having >3% organic matter Refer to the USDA or USGS Soil Survey Maps for the treated area that identify the range of organic matter and / or a documented soil survey report that lists range of % organic matter for the treated area. Collection of samples for analysis of soil in the treated area should follow procedures as per USDA's Natural Resource Conservation Services methods. Information on soil sampling can be found at www.soil.usda.gov.

For example, if the Buffer Zone is 50 feet and the application qualifies for a buffer zone reduction credit such as use of highly retentive tarps, then the buffer zone can be reduced by 10%, i.e., reduced by 5 feet based on the following calculation: 50 ft – (50 ft X 10%) = 45 feet.

If the application qualifies for two buffer zone reduction credits such as use of highly retentive tarps and soil with >3% organic matter, then the buffer zone can be reduced by 20%, i.e., reduced by 10 feet based on the following calculation: 50 ft – (50 ft X 20%) = 40 feet.

3. Applications are limited to 40 contiguous acres or less per day
4. For raised bed applications, the treated area is the raised bed not the untreated furrows. As an example, if a raised bed field is 50% raised bed (treated) and 50% furrow (untreated), and 350 lbs of MIDAS 33:67 is applied to the raised beds of the field, then the effective application rate to the treated raised bed is 350 lbs per treated acre; and that is the rate that would determine the buffer zone.

Note: Minimum allowable buffer zone is 25 feet regardless of buffer zone reduction credits.

Buffer Zone for Tree Replant – Probe or Auger Applications

- 25 feet if the application rate is less than 150 lbs MIDAS 33:67 per acre.
- 50 feet if application rate is 150 to 379 lbs MIDAS 33:67 per acre, and
- 100 feet if the application rate is 380 to 520 lbs MIDAS 33:67 per acre.

GENERAL INFORMATION AND INSTRUCTIONS

This fumigant is a highly hazardous material. All uses of this fumigant are covered under the Worker Protection Standard, and must be conducted in accordance with all of the requirements of the Worker Protection Standard (40 CFR Part 170). It is a restricted use pesticide that must only be used by Certified Applicators, certified by the state and trained by Arysta in the proper handling, worker protection, and application of MIDAS 33:67 soil fumigant and handlers under their direct supervision. Before using, read the entire label and follow all use directions and precautions. All persons working with this fumigant must be knowledgeable about the hazards and trained in the use of required air-purifying respirator equipment and detector devices, emergency procedures and proper use of the fumigant.

Control of Soil-Borne Pests: MIDAS 33:67 controls soil-borne pests including nematodes, insects, weed seeds, and diseases.

MIDAS 33:67 will control the following pests when present in soil at the time of treatment:

Weed Seeds, including broadleaf weeds such as nutsedge, pigweed, broomrape and lambsquarters, and grasses such as bermudagrass, and annual bluegrass. Effectiveness against hard seed weeds, such as mallow, dodder, morning glory, and certain leguminous weeds may be variable.

Plant-parasitic Nematodes, such as root-knot, root lesion (meadow), cyst, citrus, burrowing, false root-knot, lance, spiral, ring, stubby root, dagger, awl, sheath and sting (stylet) nematodes.

Soil-borne Insects, such as wireworms, cutworms, grubs, rootworms, ants and garden symphylans.

Soil-borne Diseases, such as *Verticillium*, *Pythium*, *Rhizoctonia*, *Phytophthora*, and *Fusarium*.

MIDAS 33:67 is not to be used as a preventative treatment for pests that may be introduced after the fumigant has been applied and/or tarps removed. To reduce the potential for the re-introduction of pests (nematodes, weed seed and disease); avoid the use of irrigation water, transplants or equipment that could carry pests into the planting area. Avoid moving infested soil back into the treated area through cultivation or other means.

GENERAL USE PRECAUTIONS

- Follow all local government instructions for posting of treated areas and post all treated areas with warning signs.
- Comply with all local ordinances and regulations.
- Do not apply within ¼ mile of nursing homes, hospitals or prisons; or licensed schools, licensed day care facilities or licensed assisted living facilities (licensed by state or local governments) that will be occupied during the buffer zone period.
- Applications are limited to 40 contiguous acres or less per day.
- Never fumigate alone. A minimum of two persons must be present during handling and application of soil fumigants.
- Additional instructions must be made available to handlers in the mechanical operation of the tractor and how to safely work with the operator while fumigating.
- Always handle this product in the open, with all handlers positioned "upwind" from the container and/or where there is adequate ventilation.
- When fumigating from a tractor, it is required that 5 gallons of water be carried on the tractor and readily available for rinsing and cleaning purposes. An additional 5 gallons of water must be available in the service truck. This water must be potable and in containers marked "Decontamination water not to be used for drinking."

- For broadcast/flat furrow applications, keep all pets, livestock and other domestic animals out of the treated areas until tarps have been removed.
- For raised bed applications, keep all pets, livestock and other domestic animals out of the treated areas for 5 days. Most raised bed applications will not result in tarp removal.
- Do not allow entry by unprotected persons into the fumigated area until the Fumigant Treated Area signs are removed.

SPILL AND LEAK PROCEDURES

- For Spill and Leak PPE requirements refer to the Personal Protective Equipment, All Handlers (including applicators) while performing tasks with liquid contact potential section on this label.
- Cease all operations if any leak develops in the fumigation system.
- Evacuate everyone from the immediate area of the spill or leak.
- Approach the area from the upwind side. Work upwind to repair leak(s), if possible.
- Only correctly trained and PPE-equipped handlers are permitted to enter. Do not permit entry into the spill or leak area by any other person until the concentration of chloropicrin is measured to be less than 0.15 ppm.
- Allow spilled fumigant to evaporate or to absorb onto vermiculite, dry sand, earth, or similar absorbent material. Such material should be disposed of on site or at an approved disposal facility.
- Contaminated soil, water and other cleanup debris may be hazardous waste. Report any spill that exceeds 302 lbs (20 gallons of product) to the National Response Center at 1-800-424-8802.

SITE-SPECIFIC FUMIGATION MANAGEMENT PLAN (FMP)

Prior to the start of fumigation, the Certified Applicator supervising the application must verify that a site-specific FMP exists for each application block (i.e., a field or portion of a field treated with a fumigant in any 24-hour period). In addition, an agricultural operation fumigating multiple application blocks may format the FMP in a manner whereby all of the information that is common to all the application blocks is captured once, and any information unique to a particular application block or blocks is captured in subsequent sections.

The FMP must be prepared by the Certified Applicator, the site owner/operator, registrant or other party.

The Certified Applicator must verify in writing (sign and date) that the site-specific FMP(s) reflects current site conditions before the start of fumigation.

Each site-specific FMP must contain the following elements:

- Applicator information (name, phone number, pesticide applicator license and/or certificate number, employer name, employer address)
- General site information
 - Application block location (e.g., county, township-range-section quadrant), address, or global positioning system (GPS) coordinates
 - Name, address, and phone number of owner/operator of the application block
 - Diagrams and maps
 - Identify nursing homes, hospitals, prisons, licensed schools, licensed day care facilities, or licensed assisted living facilities (licensed by state or local governments) within ¼ mile of the fumigated area, and document how it was determined that such sites would be unoccupied during the application period.
- General application information (target application date/window, brand name of fumigant, EPA registration number)
- Tarp information and procedures for repair, perforation, and removal (if tarp is used)
 - Brand name, lot number, thickness
 - Name and phone number of person responsible for repairing tarps

- Schedule for checking tarps for damage, tears, and other problems
- Maximum time following notification of damage that the person(s) responsible for tarp repair will respond
- Minimum time following application that tarp will be repaired
- Minimum size of damage that will be repaired
- Other factors used to determine when tarp repair will be conducted
- Name and phone number of person responsible for perforating and/or removing tarps (if other than Certified Applicator)
- Equipment/methods used to perforate tarps
- Schedule and target dates for perforating tarps
- Schedule and target dates for removing tarps
- Soil conditions (description of soil texture in application block, method used to determine soil moisture)
- Weather conditions (summary of forecasted conditions for the day of the application and the 48-hour period following the fumigant application)
 - Wind speed
 - Inversion conditions (e.g., shallow, compressed (low-level) temperature inversion)
 - Air stagnation advisory
- Buffer Zones
 - Application method
 - Application rate (pounds of Midas 33:67)
 - Application block size (acres)
 - Credits applied
 - Description of areas in the buffer zone that are not under the control of the owner/operator of the application block and how it was verified that these structures were unoccupied during the buffer zone period.
- Air-purifying respirators, air-rescue devices, and other personal protective equipment (PPE) for handlers (handler task, protective clothing, air-purifying respirator type, respirator cartridge type, respirator cartridge replacement schedule, air-rescue device type, eye protection, gloves, other PPE)
- Air-Fan Dilution System: Verification that the fan/blower intake is at least 126 inches from the ground, and the fan/blower is capable of operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.
- Emergency procedures (evacuation routes, locations of telephones, contact information for first responders, local/state/federal/tribal contacts, key personnel and emergency procedures/responsibilities in case of an incident, equipment/tarp/seal failure or complaints, or other emergencies).
- Fumigant Treated Area and/or Buffer Zone (if used) posting procedures [person(s) who will post Fumigant Treated Area and/or Buffer Zone (if used) signs, location of Fumigant Treated Area and/or Buffer Zone (if used) signs, procedures for Fumigant Treated Area and/or Buffer Zone (if used) sign removal].
- Plan describing how communication will take place between the applicator, land owner/operator, and other on-site handlers (e.g., tarp perforators/removers, irrigators) for complying with label requirements (e.g., timing of tarp perforation and removal, PPE, buffer zone location).
 - Name and phone number of persons contacted
 - Date contacted
- Authorized on-site personnel
 - Names, addresses and phone numbers of handlers
 - Names, addresses and phone numbers for employers of handlers
 - Tasks that each handler is authorized and trained to perform
 - For handlers designated to wear air-purifying respirators:
 - date of medical qualification to wear an air-purifying respirator
 - date of air-purifying respirator training, and
 - date of fit-testing for the air-purifying respirator.

- Air monitoring plan
 - If sensory irritation is experienced, indicate whether operations will be ceased or operations will continue with an air-purifying respirator
 - If the intention is to cease operations when sensory irritation is experienced, provide the name, address, and phone number of the handler that will perform monitoring activities prior to operations resuming.
 - When air-purifying respirators are worn:
 - Representative handler tasks to be monitored
 - Monitoring equipment to be used and timing of monitoring
- Good Agricultural Practices (GAPs)
 - Description of applicable mandatory GAPs
 - Measurements and documentation to ensure GAPs are achieved (e.g., measurement of soil and other site conditions)
- Description of hazard communication. (The application block has been posted in accordance with the label. Non-handlers are excluded from the buffer zone. Pesticide product labels and material safety data sheets are on-site and readily available for employees to review.)
- Record-keeping procedures (the owner/operator of the application block as well as the Certified Applicator must keep a signed copy of the site-specific FMP for 2 years from the date of application).

For situations where an initial FMP is developed and certain elements do not change for multiple fumigation sites (e.g., applicator information, authorized on-site personnel, record-keeping procedures, emergency procedures) only elements that have changed need to be updated in the site-specific FMP provided the following:

- The Certified Applicator supervising the application has verified that those elements are current and applicable to the application block before it is fumigated.
- Record-keeping requirements are followed for the entire FMP (including elements that do not change).

Once the application begins, the Certified Applicator must make a copy of the FMP available for viewing by handlers involved in the fumigation. The Certified Applicator or the owner operator of the application block must provide a copy of the FMP to any local/state/federal/tribal enforcement personnel who request the FMP. In the case of an emergency, the FMP must be made immediately available when requested by local/state/federal/tribal emergency response and enforcement personnel.

Within 30 days of completing the application portion of the fumigation process, the Certified Applicator supervising the application must complete a post-application summary that describes any deviations from the FMP that have occurred, measurements taken to comply with GAPs, monitoring results as well as any complaints and/or incidents that have been reported to him/her.

The Post-Application Summary must contain the following elements:

- Actual date of the application, application rate, and size of application block fumigated
- Summary of weather conditions on the day of the application and during the 48-hour period following the fumigant application
- Soil temperature measurement (if air temperatures were above 100° F in any of the 3 days prior to the application)
- Tarp damage and repair information (if applicable)
 - Location and size of tarp damage
 - Description of tarp/tarp seal/tarp equipment failure
 - Date and time of tarp repair
- Tarp perforation/removal details (if applicable)
 - Description of tarp removal (if different than in the FMP)
 - Date tarps were perforated
 - Date tarps were removed
- Complaint details (if applicable)
 - Person filing complaint (e.g., on-site handler, person off-site)

- If off-site person, name, address, and phone number of person filing complaint
- Description of control measures or emergency procedures followed after complaint.
- Description of incidents, equipment failure or other emergency, and emergency procedures followed (if applicable)
- Details of elevated air concentrations monitored on-site (if applicable)
 - Location of elevated air concentration levels
 - Description of control measures or emergency procedures followed
 - Air monitoring results
 - When sensory irritation experienced:
 - Date and time of sensory irritation
 - Handler task/activity
 - Handler location where irritation was observed
 - Resulting action (e.g., cease operations, continue operations with air-purifying respirators)
 - When using a direct read instrument:
 - Sample date and time
 - Handler task/activity
 - Handler location
 - Air concentration
 - Sampling method
- Date of Fumigant Treated Area sign removal
- Date of Buffer Zone sign removal (if used)
- Any deviations from the FMP
- Record-keeping procedures (the owner/operator of the application block as well as the Certified Applicator must keep a signed copy of the post-application summary for 2 years from the date of application).

MANDATORY GOOD AGRICULTURAL PRACTICES (GAPs)

The following GAPs must be followed during all fumigant applications. All measurements and other documentation planned to ensure that the mandatory GAPs are achieved must be recorded in the FMP and/or post-application summary.

- MIDAS 33:67 must be transferred through connecting hoses, pipes, and/or couplings sufficiently tight to prevent workers or other persons from coming in contact with the liquid.
- All hoses, piping, and tanks used in connection with this product shall be of a type appropriate for use under the pressure and vacuum conditions to be encountered.
- Hoses between any fumigant container and the flow divider must be Teflon® hoses reinforced with stainless steel wire braid or its equivalent.
- External sight gauges, if applicable, shall be equipped with a valve so that pipes to sight gauge can be shut off in case of breakage or leakage.
- The mechanical transfer system must be adequate to make necessary measurements of the pesticide being used.
- Shut-off devices must be installed on the exit end of all cylinder connections and at all disconnect points to prevent leakage of product when the transfer is stopped and hose is removed or disconnected.
- The pressure in hoses used to move the product must not exceed the manufacturer's maximum pressure specifications.
- Check equipment to ensure good condition and integrity prior to each use.

Tarps (tarps are required for all Midas 33:67 applications except for Tree Replant - Probe or Auger Applications). Tarps must be installed immediately after the fumigant is applied to the soil.

- A written tarp plan must be developed and included in the FMP. The plan must include:
 - schedule and procedures for checking tarps for damage, tears, and other problems
 - plans for determining when and how repairs to tarps will be made, and by whom

- o minimum time following injection that tarp will be repaired
- o minimum size of tarp damage that will be repaired
- o other factors used to determine how and when tarp repair will be conducted
- o schedule, equipment, and methods used to perforate tarps
- o aeration plans and procedures following perforation of tarp, but prior to tarp removal or planting/transplanting
- o schedule, equipment, and procedures for tarp removal

Weather Conditions

- Prior to fumigation the weather forecast for the day of the application and the 48-hour period following the fumigation must be checked to determine if unfavorable weather conditions exist (see **Identifying Unfavorable Weather Conditions** section) or are predicted and whether fumigation should begin.
- Wind speed at the application site must be a minimum of 2 mph at the start of the application or forecasted to reach at least 5 mph during the application.
- Do not apply if a shallow, compressed (low-level) temperature inversion is forecast to persist for more than 18 consecutive hours for the 48-hour period after the start of application, or if there is an air stagnation advisory issued by the National Weather Service in effect for the area in which the fumigation is planned.
- Detailed local forecasts for weather conditions, wind speed, and air stagnation advisories may be obtained on-line at: <http://www.nws.noaa.gov>, or by contacting your local National Weather Service Forecasting Office.
- **Identifying Unfavorable Weather Conditions** - Unfavorable weather conditions block upward movement of air, which results in trapping fumigant vapors near the ground. The resulting air mass can move off-site in unpredictable directions. These conditions typically exist prior to sunset and continue past sunrise and persist as late as noontime. Unfavorable conditions are common on nights with limited cloud cover and light to no wind and their presence can be indicated by ground fog or smog and can also be identified by smoke from a ground source that flattens out below a ceiling layer and moves laterally in a concentrated cloud.

Soil Preparation

- Soil must be properly prepared and at the surface generally be free of large clods. The area to be fumigated must be tilled to a depth of at least 5 to 8 inches.
- Field trash must be properly managed. Residue from a previous crop must be worked into the soil to allow for decomposition prior to fumigation. Little or no crop residue shall be present on the soil surface. Crop residue that is present must not interfere with the soil seal. Removing the crop residue prior to fumigation is important to limit the natural "chimneys" that occur in the soil when crop residue is present. These "chimneys" allow the soil fumigants to move through the soil quickly and escape into the atmosphere. This may create potentially harmful conditions for workers and bystanders and limit the efficacy of the fumigant. However, crop residue on the field serves to prevent soil erosion from both wind and water and is an important consideration. To accommodate erosion control, fumigant efficacy, and human health protection, clear fields of crop residue as close to the timing of the fumigation as possible to limit the length of time that the soil would be exposed to potentially erosive weather conditions.

Prior to All Applications:

- Ensure that application equipment does not contain components made of natural rubber, aluminum, magnesium or their alloys.

During All Applications:

- Do not change cylinders when the fumigant system is under pressure. Change cylinders with all cylinder valves in the off position.

Following All Applications:

- To minimize the potential for crop injury, allow the fumigant to dissipate before planting a crop. Seeds may be used as a bioassay to determine if MIDAS 33:67 is present in the soil at

concentrations sufficient to cause plant injury. See fumigation tables for planting requirements specific to the different application methods.

- Fumigation of highly acidic soils or those high in organic matter can cause ammonia toxicity to plants and or elevated levels of soluble salts in the soil causing phytotoxicity. Analyze soil following fumigation and fertilize as indicated. Avoid those fertilizers using ammonium salts.
- When using standard tarps, planting shall not occur for at least 10 days after application.
- When using highly retentive tarps, planting shall not occur for at least 14 days after application.

MANDATORY GOOD AGRICULTURAL PRACTICES (GAPs) FOR MIDAS 33:67 BEDDED AND BROADCAST SHANK APPLICATIONS

In addition to the GAPs required for all Midas 33:67 soil fumigation applications, the following GAPs apply for bedded and broadcast shank injection applications:

Soil Preparation

- Allow time for complete voiding of material in the buried shanks following the closure of the shutoff valve and before removing the shanks from the soil.
- In the event that trash is pulled up with the shanks after completing a treatment pass, the trash must be covered with the tarp and the edges of the tarp must be buried under at least 4 inches of compacted soil before making the next pass through the field.

Soil Temperature

- The soil temperature at the depth of injection must not be less than 55° F or exceed 90° F at the beginning of the application.
- If air temperatures have been above 100° F in any of the three days prior to application, then soil temperature must be measured and recorded in the FMP.

Soil Moisture

- The soil must be moist 9 inches below the surface. The amount of moisture needed will vary according to the soil type. Surface soil generally dries rapidly and must not be considered in this determination.
- Soil moisture must be determined by one of the following methods:
 - The USDA Feel and Appearance Method for testing, or
 - An instrument, such as a tensiometer.
- If there is insufficient moisture 9 inches below the surface, the soil moisture must be adjusted. If irrigation is not available and there is adequate soil moisture below 9 inches, soil moisture can be adjusted by disking or plowing before fumigant injection. To conserve existing soil moisture, pretreatment irrigation or pretreatment tillage should be done as close to the time of application as possible.
- Measure soil moisture at a depth of 9 inches at either end of the field, no more than 48 hours prior to application.

Soil moisture determination using the USDA Feel and Appearance Method

- For **coarse** textured soils (fine sand and loamy fine sand) there must be enough moisture (50 to 75 percent available soil water moisture/50 to 75 percent field capacity) so the soil is moist, forms a weak ball with loose and clustered sand grains on fingers, darkened color, moderate water staining on fingers; will not ribbon.
- For **moderately coarse** textured soils (sandy loam and fine sandy loam) there must be enough moisture (50 to 75 percent available soil water moisture/50 to 75 percent of field capacity) so the soil is moist, forms a ball with defined finger marks, very light soil/water staining on fingers, darkened color will not stick.
- For **medium** textured soils (sandy clay loam, loam, and silt loam) there must be enough moisture (50 to 75 percent available soil water moisture/50 to 75 percent of field capacity) so the soil is moist, forms a ball, very light staining on fingers, darkened color, pliable, and forms a weak ribbon between the thumb and forefinger.

- For **fine** textured soils (clay, clay loam, and silty clay loam) there must be enough moisture (50 to 75 percent available soil water moisture/50 to 75 percent of field capacity) so the soil is moist, forms a smooth ball with defined finger marks, light soil/water staining on fingers, ribbons between thumb and forefinger.
- For **fields with more than one soil texture**, soil moisture content in the lightest textured (most sandy) areas must comply with this soil moisture requirement. Whenever possible, the field should be divided into areas of similar soil texture and the soil moisture of each area should be adjusted as needed. Coarser textured soils can be fumigated under conditions of higher soil moisture than finer textured soils; however, if the soil moisture is too high, fumigant movement will be retarded and effectiveness of the treatment will be reduced. Previous and/or local experience with the soil to be treated or the crop to be planted can often serve as a guide to conditions that will be acceptable. If there is uncertainty in determining the soil moisture content of the area to be treated, a local extension service agent, soil conservation service specialist, or pest control advisor (agriculture consultant) should be consulted for assistance.

Application Depth

- **For Tarped-Broadcast and Tarped-Bedded Applications:** The injection point must be a minimum of 6 inches from the nearest final soil/air interface. The application depth in preformed beds must not be below the bed furrow.

Prevention of End Row Spillage

- Do not apply or allow fumigant to spill onto the soil surface. For each injection line either have a check valve located as close as possible to the final injection point, or drain/purge the line of any remaining fumigant prior to lifting injection shanks from the ground.
- Do not lift injection shanks from the soil until the shut-off valve has been closed and the fumigant has been depressurized (passively drained) or purged (actively forced out via air compressor) from the system.

Calibration, Set-up, Repair and Maintenance for Application Rigs

- Brass, carbon steel or stainless steel fittings must be used throughout. Polyethylene tubing, polypropylene tubing, Teflon® tubing or Teflon®-lined steel braided tubing must be used for all low pressure lines, drain lines, and compressed gas or air pressure lines. All other tubing must be Teflon®-lined steel braided.
- Galvanized, PVC, nylon or aluminum pipe fittings must not be used.
- All rigs must include a filter to remove any particulates from the fumigant, and for pressurized systems a check valve to prevent backflow of the fumigant into the pressurizing cylinder or the compressed air system
- Rigs must include a flowmeter or a constant pressure system with orifice plates to insure the proper amount of fumigant is applied.
- To prevent the backflow of fumigant into the compressed gas cylinder (e.g., nitrogen, other inert gas, compressed air), if used, applicators must:
 - When applying MIDAS 33:67 from steel cylinders using compressed gas, ensure that positive pressure is maintained in the cylinder at not less than 80 psi during the entire time it is connected to the application rig, (*This is not required for a compressed air system that is part of the application rig because if the compressor system fails the application rig will not be operable*).
 - When applying MIDAS 33:67 from drum-in-drum poly-totes, using compressed gas, maintain a positive pressure of not less than 35 psi during the entire time it is connected to the application rig. (*This is not required for a compressed air system that is part of the application rig because if the compressor system fails the application rig will not be operable*).
 - Ensure that application rigs are equipped with properly functioning check valves between the compressed gas cylinder or compressed air system and the fumigant cylinder. The check valve is best placed on the outlet side of the pressure regulator, and is oriented to only allow compressed gas to flow out of the cylinder or compressed air out of the compressed air system.

- Always pressurize the system with compressed gas or by use of a compressed air system before opening the fumigant cylinder valve.
- Before using a fumigation rig for the first time, or when preparing it for use after storage, the operator must check the following items carefully:
 - Check the filter, and clean or replace the filter element as required.
 - Check all tubes and chisels to make sure they are free of debris and obstructions.
 - Check and clean the orifice plates and screen checks, if installed.
 - Pressurize the system with compressed gas or compressed air, and check all fittings, valves, and connections for leaks using soap solution.
- Install the fumigant cylinder, and connect and secure all tubing. Slowly open the compressed gas or compressed air valve, and increase the pressure to the desired level. Slowly open the fumigant cylinder valve, always watching for leaks.
- When the application is complete, close the fumigant cylinder valve and blow residual fumigant out of the fumigant lines into the soil using compressed gas or compressed air. At the end of the application, disconnect all fumigant cylinders from the application rig. At the end of the season, seal all tubing openings with tape to prevent the entry of insects and dirt.

Application equipment must be calibrated and all control systems must be working properly. Proper calibration is essential for application equipment to deliver the correct amount of fumigant uniformly to the soil. Refer to the manufacturer's instructions on how to calibrate your equipment, usually the equipment manufacturer, fumigant dealer, or Cooperative Extension Service can provide assistance.

Soil Sealing

Raised Bed Applications

- Use tractor mounted chisels spaced no more than 12 inches apart. Injection spacing of 12 inches or less is typically performed with a multiple shank applicator. The treated ground must be sealed using either:
 - Soil sealing at the time of application: The treated ground must be sealed using closing shoes, roller, compaction roller, cultipacker, or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarp (with fumigant injection) by tarp-laying equipment mounted on the application tractor; or
 - Bed shaper: The chisels shall be placed with the injection point under the bed shaper, and the tarp shall be laid down simultaneously (with fumigant injection) by tarp-laying equipment mounted on the application tractor; or
 - Combination bed former and bed shaper: The chisels shall be placed between the bed former and the bed shaper. The tractor with the tarp-laying equipment shall immediately follow the application tractor.

Broadcast/Flat Fume Applications

- Use tractor mounted chisels spaced no more than 12 inches apart.
 - Soil sealing at time of application: The treated ground must be sealed using closing shoes, roller, compaction roller, cultipacker or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarp (with fumigant injection) by tarp-laying equipment mounted on the application tractor.

TREE REPLANT – PROBE OR AUGER APPLICATION: MANDATORY GAPs

This application method is used when MIDAS 33:67 is applied to individual tree sites in an existing orchard where shank applications are not possible.

In addition to the GAPs required for all MIDAS 33:67 soil fumigation applications, the following GAPs apply for MIDAS 33:67 tree replant – probe or auger applications:

Site Preparation

- Remove the tree stump and primary root system in each individual tree-site with a back-hoe or other similar equipment, for example an auger.
- The hole must be backfilled with soil before application.

Application Depth

- The fumigant must be injected at least 18 inches into the soil, typically between 18 and 36 inches.

System Flush

- Before removing the application wand from the soil the wand must be cleared using nitrogen or compressed air.

Soil Sealing

- After the wand is cleared and removed from the soil, the injection hole must be either covered with soil and tamped, or the soil must be compacted over the injection hole.

MIDAS 33:67 PRE-PLANT FIELD FUMIGATION METHODS

Fumigation with MIDAS 33:67 shall only be performed in accordance with the following three application techniques: 1) Raised Bed Application, 2) Broadcast/Flat Fume Application, or 3) Tree Replant – Probe or Auger Application (stone fruit, nut trees, vines, and field-grown ornamentals only). Application methods and rates of application for each of these methods are discussed in detail below.

Application Rates for Raised Bed Fumigation: Rates in the table below are given in pounds of MIDAS 33:67 per broadcast acre. The amount of product applied will be proportionate to the row spacing and width of the raised bed. To calculate the amount of product to be applied, multiply the application rate in lbs MIDAS 33:67/broadcast acre by the appropriate modifier from the Field Rate Modifier Table provided below.

RAISED BED SOIL FUMIGATION TABLE		
Crop	MIDAS 33:67 Per Broadcast Acre ¹	Time Between Application and Planting ²
Field-Grown Ornamentals Peppers Strawberries Tomatoes	Standard Tarps 300 - 520 lbs/Broadcast Acre (19.9 – 34.4 gal/Broadcast Acre)	10 – 14 days
	Highly Retentive Tarps³ 175-250 lbs/Broadcast Acre 11.6 – 16.6 gal/Broadcast Acre	14 – 21 days when using highly retentive tarps
NOTE: ¹ For fields infested with nutsedge and Malva, apply a minimum of 450 lbs/broadcast acre (29.8 gal/acre) of MIDAS 33:67 with standard film and 250 lbs/broadcast acre (16.6 gal/acre) with highly retentive tarps. ² Use the longer planting restriction period under conditions of high soil moisture, heavy soils, or rain. ³ Contact your Arysta LifeScience representative for tarp selection and rate reduction recommendations and approved tarps.		

Field Rate Modifier Table for Raised Bed Applications

Row Spacing (inches)	Bed Width (inches)	Field Rate Modifier
72	40	0.55
72	36	0.50
72	32	0.44
72	30	0.42
72	28	0.39
66	32	0.48
66	30	0.45
66	28	0.42
66	24	0.36
60	30	0.50
60	28	0.47
48	28	0.58

APPLICATION RATES FOR BROADCAST / FLAT FUME FUMIGATION WITH STANDARD TARPS

Crop	MIDAS 33:67 Per Acre ¹	Time Between Application and Planting
Field-Grown Ornamentals Peppers Strawberries Tomatoes Turf	300 – 520 lbs/Acre (19.9 – 34.4 gal/Acre)	10 – 14 days
Stone Fruits (Apricot, Sweet Cherry, Tart Cherry, Nectarine, Peach, Plum, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot, Fresh Prune) Tree Nuts (Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (Hazelnut), Hickory Nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Black Walnut, English Walnut) Vines (Table, Raisin and Wine Grape)	360- 520 lbs/Acre (23.8 – 34.4 gal/Acre)	10 – 14 days
Nurseries (including strawberries, stone fruits, tree nuts and conifer trees)	520 lbs/Acre (34.4 gal/Acre)	10 – 14 days

NOTE:

¹ For fields infested with nutsedge and Malva apply a minimum of 300 lbs/acre (19.9 gal/acre) of MIDAS 33:67.

Application Rates for Broadcast/Flat Fume Fumigation with Highly Retentive Tarps

Contact your Arysta LifeScience North America representative for information on tarp selection and rate reduction recommendations for highly retentive tarps. Applications using highly retentive tarps shall not exceed 300 lbs/Acre (19.9 gal/Acre).

Tree Replant – Probe or Auger Application: For Stone Fruit Trees, Tree Nuts, Vines, and Field Grown Ornamental Trees and Shrubs, use 2 lbs of MIDAS 33:67 per injection site. Use 1 injection site per 100 square feet (i.e., one injection site every 10 feet in a standard grid pattern). Planting or replanting of

Stone Fruit Trees, Tree Nuts, Vines, and Field-Grown Ornamental Trees and Shrubs may begin 14 days after treatment. DO NOT PLANT if the odor of chloropicrin is detectable.

Do not treat more than 230 trees/shrubs/vines per acre per day.

ROTATIONAL CROPS

Food crops other than strawberry, tomatoes, and peppers require a 4 month plant back rotation restriction from the date of fumigant application. Crop rotation to non-food crops or non-bearing fruit or nut trees is not restricted.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store in a dry, cool, well-ventilated area under lock and key. When appropriate to prevent tipping, store cylinders upright, secured to a rack or wall. Post as a pesticide storage area.

Handling: Product cylinders shall not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging or sliding. Do not use rope slings, hooks, tongs, or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured.

Do not remove valve protection bonnet and safety cap until immediately before use. When cylinder is not in use, close valve by turning clockwise until hand tight, screw safety cap onto valve outlet, and replace protection bonnet.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Return of Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

This pesticide container, whether full or partially used, is the property of the manufacturer or distributor where it was purchased and must be returned to the distributor of origin. Do not ship containers without safety caps or valve protection bonnets. Containers shall never be refilled by the consumer or used for any other product or purpose.

FOR 24-HOUR CHEMICAL EMERGENCY (spill, leak, fire or accident) ASSISTANCE:
Call CHEMTREC at 1-800-424-9300

Warranty and Disclaimer Statement

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America, LLC ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF ARYSTA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF ARYSTA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT ARYSTA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.

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Arysta LifeScience and the Arysta LifeScience logo are registered trademarks of Arysta LifeScience, LLC

S# 875750

Midas 33:67 Replacement Labels - Florida Only and Other States

HAWKINS, Alex

to:

Andrea Carone

04/01/2010 04:47 PM

Show Details

Andrea –

Attached are the Midas 33:67 labels that have been updated based on your e-mailed comments from February 25 and our subsequent conference call on March 12. I'm working on the drip labels currently and will forward them to you either tomorrow or Monday (at the latest). I discovered a relatively minor error on the Midas 50:50 and 98:2 labels I sent you earlier. In the Raised Bed Soil Fumigation Table on or about page 22, the reference to footnote #2 should have been associated with the subheading "Time Between Application and Planting" rather than being placed after "10 – 14 days" since it applies to both standard and highly retentive tarps.

Arysta continues to have issues with the minimum application depth of 8 inches established by the chloropicrin RED. As you know, the current EPA-approved Midas labels allow application at depths from 6-15 inches below the soil surface for broadcast and bedded shank applications. If an 8-inch minimum application depth is mandated, Arysta will have serious problems in Florida (and perhaps some areas in California) because, at least in Florida, it is quite common for raised beds to be less than 8 inches high. As a result, it will be impossible to apply Midas products 8 inches deep without also applying below the bed furrow. Our label states that "the application depth in preformed beds must not be below the bed furrow." Because of this issue, I have left the minimum application depth at 6 inches in the attached labels.

Regards,

Alex Hawkins

W. A. Hawkins, Jr., Ph.D.

Regulatory Manager

Arysta LifeScience North America, LLC

919-678-4886 / fax: 919-678-2194

**RESTRICTED USE PESTICIDE
DUE TO ACUTE TOXICITY**

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

MIDAS® 33:67

FOR SALE AND USE IN FLORIDA ONLY

Only For Pre-Plant Fumigations of Fields Intended for Commercial Production of Listed Crops and Field-Grown Ornamentals, for the Control of Soil-Borne Pests Including Weed Seeds, Nematodes, Insects, and Diseases.

ACTIVE INGREDIENTS:

Iodomethane.....	32.93%
Chloropicrin	66.67%
OTHER INGREDIENTS:	0.40%
TOTAL:	100.00%

One gallon weighs 15.1 pounds (5 pounds Iodomethane and 10.1 pounds Chloropicrin).

**KEEP OUT OF REACH OF CHILDREN
DANGER / PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail).

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person.
<p>HOT LINE NUMBERS</p> <p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p> <p>FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL: 1-866-303-6952 or 1-651-632-8946</p>	
<p>NOTE TO PHYSICIAN</p> <p>Probable mucosal damage may contraindicate the use of gastric lavage. Symptoms of overexposure may include irritation to eyes, skin, and respiratory system, shortness of breath, nausea, vomiting, dizziness, ataxia, slurred speech, drowsiness, blurred vision, staggering gait and mental imbalance, with probable recovery after period of no exposure. Treatment is symptomatic.</p>	

EPA Reg. No. 66330-59
EPA Est. No.

For Product Information Call: 1-866-761-9397

Net Contents: _____ LBS.

Manufactured for
Arysta LifeScience North America, LLC
15401 Weston Parkway, Suite 150
Cary, NC 27513

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

Danger. Corrosive. Causes irreversible eye damage. Corrosive to skin. Causes skin burns. May be fatal if inhaled or swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin or on clothing. Do not breathe vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SPECIAL NOTE: This product contains chloropicrin, a poisonous liquid or vapor. Inhalation of vapors may be fatal. Chloropicrin is readily identified by smell. Exposure to very low concentrations of vapor will cause irritation of eyes, nose and throat. Continued exposure after irritation is evident or higher concentrations may cause painful irritation to the eyes or temporary blindness. Liquid will cause chemical burns to skin or eyes. Do not get on skin, in eyes, or on clothing. Chloropicrin fumigant has the capacity to cause marked irritation to the upper respiratory tract and is a strong lachrymator (tear producing eye irritant). Low concentrations, below those necessary to cause serious systemic intoxication, are capable of causing severely painful eye irritation, hence will not be voluntarily tolerated. However, the effect may be so powerful that a person may become temporarily blinded and panic-stricken and that in turn may lead to accidents.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminate or viton \geq 14 mils. For more options, follow the instructions for category H on the chemical-resistance category selection chart.

All Handlers (including applicators) while performing tasks with liquid contact potential (including, but not limited to, supervisors, loaders, tractor drivers, and persons involved with spill recovery, container disposal, and equipment repair when within arm's length proximity and handling, adjusting or securing charged/pressurized lines, supply tubing, cylinders/tanks and other delivery equipment that contains liquid fumigant when cylinder/tank valves are in the open position) **must wear:**

- Loose fitting or well ventilated long-sleeved shirt and long pants,
- Chemical-resistant gloves,
- Chemical-resistant apron,
- Chemical-resistant footwear and socks,
- Full face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles, and
- A half face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C).
- In addition, if sensory irritation (tearing, burning, of the eyes or nose) is experienced while wearing a half-face air-purifying respirator, handlers must wear at a minimum a full-face air-

purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C). See Directions for Use, Protection for Handlers, Respiratory Protection and Stop Work Triggers, number 1: *Handlers Wearing Half-Face Air-Purifying Respirators*, for when a full-face respirator is required.

All Handlers (including applicators) present in either the application block (i.e., a field or portion of a field treated with a fumigant in any 24-hour period) until 5 days (120 hours) after the application is complete (i.e., after tarps have been laid) or the buffer zone during the buffer zone period (to include supervisors, tractor drivers, co-pilots, shovelers, cross ditchers, and tarp monitors) (see exception for transient travel in the Buffer Zone section) must wear:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles.
- A half face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C).
- In addition, if sensory irritation (tearing, burning, of the eyes or nose) is experienced while wearing a half-face air-purifying respirator, handlers must wear at a minimum a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C). See Directions for Use, Protection for Handlers, Respiratory Protection and Stop Work Triggers, number 1: *Handlers Wearing Half-Face Air-Purifying Respirators*, for when a full-face respirator is required.
- Do not wear jewelry, gloves, goggles, tight clothing, rubber protective clothing, or rubber boots when handling. Iodomethane and chloropicrin are heavier than air and can be trapped inside clothing and cause skin injury.

All Handlers (including applicators) present in the application block (i.e., a field or portion of a field treated with a fumigant in any 24-hour period) 5 days (120 hours) after the application is complete (i.e., after tarps have been laid) until the entry restricted period expires (to include planters, hole punchers, tarp cutters, tarp removers, tarp remover drivers, and persons involved with tarp and irrigation repair, air monitoring, scouting/crop advising) must wear:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles.
- In addition, if sensory irritation (tearing, burning, of the eyes or nose) is experienced, handlers must wear at a minimum a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C). See Directions for Use, Protection for Handlers, Respiratory Protection and Stop Work Triggers, number 3: *Handlers in the Application Block 5 days (120 hours) after the Application is Complete until the Entry Restricted Period Expires*, for when a full-face respirator is required.
- Do not wear jewelry, gloves, goggles, tight clothing, rubber protective clothing, or rubber boots when handling. Iodomethane and chloropicrin are heavier than air and can be trapped inside clothing and cause skin injury.

IMPORTANT: an air-supplying respirator [i.e., a respirator connected directly to a clean air source or a self-contained breathing apparatus (SCBA)] is not permitted for routine handler tasks. Such respirators are only permitted in emergencies such as a spill or leak or when corrective action is needed to reduce air levels to acceptable levels.

User Safety Requirements

- Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them.
- Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing and gloves, if worn, immediately if pesticide gets inside, then wash skin thoroughly and put on clean clothing and gloves, if worn.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to mammals and birds. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate. Iodomethane and chloropicrin have certain properties and characteristics in common with chemicals that have been detected in ground water (iodomethane and chloropicrin are highly soluble in water and have low adsorption to soil).

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat, open flames, or sparking electrical equipment. Do not use application devices containing natural rubber, aluminum, magnesium or their alloys.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during the application.

For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), restricted entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

For the entry restricted period and notification requirements, see the **Entry Restricted Period and Notification** sections of this labeling.

PPE for Entry During the Entry Restricted Period: PPE for entry that is permitted by this labeling is listed in the Hazards to Humans and Domestic Animals section of this labeling.

HANDLERS

The following activities are prohibited from being performed in the application block (i.e., the field or portion of a field treated with a fumigant in any 24-hour period) by anyone other than persons who have been appropriately trained and equipped as handlers in accordance with the requirements in the Worker Protection Standard (40 CFR Part 170), from the start of the application until the entry restricted period ends (NOTE: persons installing, perforating, removing, repairing, and monitoring tarps are considered handlers for the durations listed below). Those activities include those persons:

- Participating in the application as supervisors, loaders, drivers, tractor co-pilots, shovelers, cross ditchers, or as other direct application participants (the application starts when the fumigant is first introduced into the soil and ends after the fumigant has stopped being delivered/dispensed to the soil);
- Using devices to take air samples to monitor fumigant air concentrations;
- Cleaning up fumigant spills (this does not include emergency personnel not associated with the fumigation application);
- Handling or disposing of fumigant containers;
- Cleaning, handling, adjusting, or repairing the parts of fumigation equipment that may contain fumigant residues;
- Installing, repairing, operating, or removing irrigation equipment in the fumigant application block;
- Entering the application site to perform scouting, crop advising, or monitoring tasks;
- Installing, perforating (cutting, punching, slicing, poking), removing, repairing, or monitoring tarps:
 - until 14 days after application is complete if tarps are not perforated and removed during those 14 days, or
 - until tarp removal is complete if tarps are **both** perforated **and** removed less than 14 days after application, or
 - until 48 hours after tarp perforation is complete if they will not be removed within 14 days after application.

NOTE: See Tarp Perforation and/or Removal section on this labeling for requirements about when tarps are allowed to be perforated.

- Performing any handling tasks as defined by the WPS.

PROTECTION FOR HANDLERS

Respiratory Protection and Stop Work Triggers

1. Handlers Wearing Half-Face Air-Purifying Respirators

The following procedures must be followed to determine whether a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent, is required or if operations must cease for handlers wearing a half-face air-purifying respirator:

- If at any time any handler experiences sensory irritation (tearing, burning of the eyes or nose) while wearing a half-face air-purifying respirator:
 - A full-face air-purifying respirator must be worn by all handlers who remain in the application block and/or buffer zone, **or**
 - Operations must cease and handlers not wearing full-face air-purifying respirators must leave the application block and/or buffer zone.
- When full-face air-purifying respirators are worn, then air-monitoring samples for chloropicrin must be collected at least every 2 hours in the breathing zone of a handler performing a representative handling task.
- When using monitoring devices to monitor air concentration levels, a direct reading detection device, such as a Matheson-Kitagawa, Dräger, or Sensidyne device must be used. The devices must have a sensitivity of at least 0.15 ppm for chloropicrin.
- When breathing zone samples are required, they must be taken outside respiratory protection equipment and within a ten inch radius of the handler's nose and mouth.
- If at any time (1) a handler experiences any sensory irritation when wearing a full-face air-purifying respirator; or (2) an air sample is greater than or equal to 1.5 ppm, then all handler activities must cease and handlers must be removed from the application block and buffer zone. If operations cease, the emergency plan detailed in the FMP must be implemented.

- Handlers can remove full-face air-purifying respirators or resume work activities if all of the following conditions exist provided that a half-face air-purifying respirator is worn:
 - Two consecutive breathing zone samples for chloropicrin taken at the handling site at least 15 minutes apart must be less than 1.5 ppm;
 - Handlers do not experience sensory irritation; and
 - Air-purifying respirator cartridges have been changed.
 - During the collection of air samples a full-face air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.

2. Handlers in the Application Block 5 days (120 hours) after the Application is Complete until the Entry Restricted Period Expires

The following procedures must be followed to determine whether a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent, is required or if operation must cease for handlers in the application block after the application is complete

- If at any time any handler experiences sensory irritation (tearing, burning of the eyes or nose) then either:
 - A full-face air-purifying respirator must be worn by all handlers who remain in the application block or
 - Operations must cease and handlers not wearing respiratory protection must leave the application block.
- Handlers can remove full-face air-purifying respirators or resume operations if two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show that levels of chloropicrin have decreased to less than 0.15 ppm provided that handlers do not experience sensory irritation. During the collection of air samples, a full-face air-purifying respirator must be worn by the handler taking air samples. Samples must be taken where the sensory irritation is first experienced.
- When using monitoring devices to monitor air concentration levels, a direct reading detection device, such as a Matheson-Kitagawa, Dräger, or Sensidyne device, must be used. The devices must have a sensitivity of at least 0.15 ppm for chloropicrin.
- When breathing zone samples are required, they must be taken outside respiratory protection equipment and within a ten inch radius of the handler's nose and mouth.
- When full-face air-purifying respirators are worn, then air monitoring samples must be collected at least every two hours in the breathing zone of a handler performing a representative handling task.
- If at any time (1) a handler experiences any sensory irritation when wearing a full-face air-purifying respirator, or (2) an air sample is greater than or equal to 1.5 ppm, then all handler activities must cease and handlers must be removed from the application block. If operations cease, the emergency plan detailed in the FMP must be implemented.
- Handlers can resume work activities without full-face air-purifying respirators if two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show levels of chloropicrin have decreased to less than 0.15 ppm, provided that handlers do not experience sensory irritation. During the collection of air samples a full-face air purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.
- Work activities can resume if all of the following conditions exist provided that a full-face air-purifying respirator is worn:
 - Two consecutive chloropicrin breathing zone samples taken at the handling site at least 15 minutes apart must be less than 1.5 ppm, but are greater than 0.15 ppm;
 - Handlers do not experience sensory irritation while wearing the full-face air-purifying respirator; and
 - Cartridges have been changed.
 - During the collection of air samples, a full-face air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.

Supervision of Handlers

For all applications: From the start of the application until the fumigant has stopped being delivered/dispensed into the soil, i.e., after the soil is sealed, an Arysta trained and state certified applicator must be at the fumigation site in the line of sight of the application and must directly supervise all persons performing handling activities.

For handling activities that take place after the fumigant has been delivered/dispensed into the soil until the entry restricted period expires, the Certified Applicator does not have to be on-site, but must have communicated, in a manner that can be understood, to the site owner/operator and handlers responsible for carrying out those activities the information necessary to comply with the label and procedures described in the FMP (e.g., emergency response plans and procedures). Communication activities must be captured in the FMP.

IMPORTANT: This requirement does not override the requirements in the Worker Protection Standard for Agricultural Pesticides for information exchange between owners/operators of agricultural establishments and commercial pesticide applicators.

The Certified Applicator must provide **Fumigant Safe Handling** information to each handler involved in the application or confirm that each handler participating in the application has received **Fumigant Safe Handling** information in the past 12 months. **Fumigant Safe Handling** information will be provided where this product is purchased, or at (*insert EPA website*).

For all handling tasks at least two handlers trained under the provisions of the WPS 40 CFR 170.230 must be present.

Respirator Fit Testing, Medical Qualification and Training

Employers must verify that any handler who uses a respirator is:

- Fit-tested and fit-checked using a program that conforms to OSHA's requirements (see 29 CFR Part 1910.134)
- Trained using a program that conforms to OSHA's requirements (see 29 CFR Part 1910.134)
- Examined by a qualified medical practitioner to ensure physical ability to safely wear the style of respirator to be worn. A qualified medical practitioner is a physician or other licensed health care professional who will evaluate the ability of a worker to wear a respirator. The initial evaluation consists of a questionnaire that asks about medical conditions (such as a heart condition) that would be problematic for respirator use. If concerns are identified, then additional evaluations, such as a physical exam, might be necessary. The initial evaluation must be done before respirator use begins. Handlers must be reexamined by a qualified medical practitioner if their health status or respirator style or use-conditions change. Upon request by local/state/federal/tribal enforcement personnel, employers must provide documentation demonstrating how they have complied with these requirements.

Providing, Cleaning and Maintaining PPE

The employer of any handler (as stated in this label) must make sure that all handlers are provided and correctly wear the required PPE. The PPE must be cleaned and maintained as required by the Worker Protection Standard for Agricultural Pesticides.

Air-Purifying Respirator Availability

At a minimum two handlers must have the appropriate air-purifying respirator and cartridges available and these handlers must be fit-tested, trained and medically examined.

The employer of any handler must confirm that an air-purifying respirator and appropriate cartridges of the type specified in the PPE section of this labeling are immediately available for each handler who will wear one. This must be documented in the FMP.

Cartridges or canisters must be replaced when odor or irritation from this product becomes apparent, if the measured concentration of chloropicrin is greater than or equal to 1.5 ppm, or after 8 hours of use, whichever occurs first.

Air-Rescue Device Availability

The employer of any handler must confirm that at least one air-rescue device (e.g., SCBA) is on-site and is ready for use in case of an emergency. This must be documented in the FMP.

Exclusion of Non-Handlers from Application Block:

The Certified Applicator supervising the application and the owner/operator of the establishment where the fumigation is taking place must make sure that all persons who are not trained and PPE-equipped and who are not performing one of the handling tasks as stated in this labeling are excluded from the application block during the entry restricted period and from the buffer zone during the buffer zone period.

Entry Restricted Period

Entry (including early entry that would otherwise be permitted under the WPS) by any person, other than a correctly trained and PPE-equipped handler who is performing a handling task listed on this labeling, is PROHIBITED from the start of the application until:

- 5 days (120 hours) after the application is complete for untarped applications, or
- 5 days (120 hours) after application is complete if tarps are not perforated and removed for at least 14 days following application, NOTE: Persons installing, repairing, or monitoring tarps are handlers until 14 days after the application is complete if tarps are not perforated and removed during those 14 days, or
- 48 hours after tarp perforation is complete if tarps will not be removed for at least 14 days following application, or
- Until tarp removal is completed if tarps are both perforated and removed less than 14 days after application.

NOTE: See **Tarp Perforation and/or Removal** section on this labeling for requirements about when tarps are allowed to be perforated.

Notification

Notify workers of the application by warning them orally and by posting Fumigant Treated Area signs. The Fumigant Treated Area signs must bear the skull and crossbones symbol and state:

- (1) "DANGER/PELIGRO"
- (2) "Areas under fumigation, DO NOT ENTER/NO ENTRE"
- (3) Iodomethane/Chloropicrin Fumigant In Use
- (4) Date and time of fumigation
- (5) Date and time entry restricted period is over
- (6) MIDAS 33:67 and
- (7) Name, address, and telephone number of the Certified Applicator in charge of the fumigation.

Post the Fumigant Treated Area sign instead of the WPS sign for this application but follow all WPS requirements pertaining to location, legibility, size and timing of posting and removal.

Post the Fumigant Treated Area signs at all entrances to the application block (i.e., the field or portion of a field treated with a fumigant in any 24-hour period.)

Tarp Perforation and/or Removal

IMPORTANT: Persons perforating, repairing, removing, and/or monitoring tarps are defined, within certain time limitations, as handlers (see handlers as stated in this labeling) and must be provided the PPE and other protections for handlers as required on this labeling and in the Worker Protection Standard for Agricultural Pesticides.

- Standard tarps must not be perforated until a minimum of 5 days (120 hours) have elapsed after the fumigant injection into the soil is complete (e.g., after tarps have been laid), unless a weather condition exists which necessitates early perforation or removal, see **Early Tarp Removal for Broadcast Applications Only** and **Early Tarp Perforation for Flood Prevention Activities** sections. Highly retentive tarps (on an Arysta approved list) must not be perforated until a minimum of 10 days (240 hours) have elapsed after the fumigation injection into the soil is complete.
- If tarps will be removed before planting, tarp removal must not begin until at least 2 hours after tarp perforation is complete.
- If tarps will not be removed before planting, planting or transplanting must not begin until at least 48 hours after the tarp perforation is complete.
- If tarps are left intact for a minimum of 14 days after fumigant injection into the soil is complete, planting or transplanting may take place while the tarps are being perforated.
- Each tarp panel used for broadcast fumigation must be perforated.
- Tarps used for fumigations may be perforated manually **ONLY** for the following situations:
 - At the beginning of each row when a coultter blade (or other device which performs similarly) is used on a motorized vehicle such as an ATV.
 - In fields that are 1 acre or less.
 - During flood prevention activities.
- In all other instances tarps must be perforated (cut, punched, poked, or sliced) only by mechanical methods.
- Tarp perforation for broadcast fumigations must be completed before noon.
- For broadcast fumigations, tarps must not be perforated if rainfall is expected within 12 hours.
- **Early Tarp Removal for Broadcast Applications Only:**
 - Tarps may be removed before the required 5 days (120 hours) or 10 days (240 hours) if adverse weather conditions have compromised the integrity of the tarp, provided that the compromised tarp poses a safety hazard. *Adverse weather* includes high wind, hail, or storms that blow tarps off the field and create a hazard, e.g., tarps blowing into power lines and onto roads. A *compromised tarp* is a tarp that due to an adverse weather condition is no longer performing its intended function and is creating a hazard.
 - If tarps are removed before the required 5 days (120 hours) or 10 days (240 hours) have elapsed due to adverse weather, the events must be documented in the post-application summary.
- **Early Tarp Perforation for Flood Prevention Activities**
 - c Tarp perforation is allowed before the 5 days have elapsed.
 - c Tarps must be immediately retucked and packed after soil removal.

Buffer Zone

The area adjacent to the treated area is referred to as the buffer zone. The buffer zone shall extend from the edge of the treated area in all directions. See Buffer Zone Table. The minimum buffer zone distance shall be 25 feet.

The Certified Applicator supervising the soil fumigation is responsible for the following:

1. Calculating the appropriate size of the buffer zone that must be maintained from the start of the application until 48 hours following the end of the application;
2. Establishing and maintaining the buffer zone from the start of the application until 48 hours following the end of the application. Buffer zones must be on the property under the control of the Certified Applicator and must not include property that is not under the control of the Certified Applicator unless written permission is obtained prior to fumigation, including signature, from responsible parties from all properties that will be included or partially included in the buffer zone. Buffer zones shall not extend onto public roads or areas, or onto any other land for which written consent is not attainable. The Certified Applicator must use an appropriate means to manage and maintain the buffer zone such as posting Buffer Zone signs around the perimeter of the buffer zone at potential points of entry, using trained workers to patrol the buffer zone, or other equivalent means. If Buffer Zone signs are used, they must be posted from the start of the application until 48 hours following the end of the application and must be removed within 3 days

of the end of the buffer zone period. The Buffer Zone signs must include the same warning symbol and statements required for Fumigant Treated Area signs as stated on this label with the exception that signs will indicate "Fumigant Buffer Zone" at the top of the sign and will delete the statement "areas under fumigation".

3. Ensuring that unprotected workers and bystanders do not enter the buffer zone from the start of the application until 48 hours following the end of the application. Exception: Unprotected workers and bystanders may travel through (but not engage in any activity in) the buffer zone during the application and the 48-hour period following the end of the application, provided their total exposure time in any 24-hour period is 15 minutes or less. However, travel by unprotected workers or bystanders through the fumigated area itself is prohibited during the entire Entry Restricted period. Handlers protected with required Personal Protective Equipment (PPE) may work in buffer zones. See the PERSONAL PROTECTIVE EQUIPMENT section.
4. Ensuring application site has a distinctive buffer zone. The buffer zone of the field to be treated cannot overlap the buffer zone of another field treated within the last 48 hours.
5. Ensuring that there are no occupied nursing homes, hospitals, or prisons; and no occupied licensed schools, licensed day care facilities and licensed assisted living facilities (licensed by state or local governments) within ¼ mile of the fumigated area during the buffer zone period.

Determining Buffer Zone Distance

- Determine the size of the buffer zone using the following Buffer Zone Table.
- The size of the buffer zone will be dependent on the following three factors:
 - The number of field acres that are being treated with MIDAS 33:67.
 - The pounds of MIDAS 33:67 that are being applied per treated acre.
 - Buffer zone reduction credits.

Buffer Zone Table

MIDAS 33:67 Application Rate (Lbs per Treated Acre) ⁴	SIZE OF FIELD IN ACRES (Buffer zone distance in feet) ^{1,2}							
	Up to 5 Acres	6 – 10 Acres	11-15 Acres	16- 20 Acres	21-25 Acres	26-30 Acres	31-35 Acres	36-40 ³ Acres
100	25	25	45	60	70	80	90	95
150	25	30	60	85	100	115	130	145
175	25	35	70	100	120	135	150	165
200	25	40	80	115	135	155	175	190
250	25	50	95	140	165	190	215	235
300	30	60	115	170	200	230	260	285
350	35	70	135	200	235	265	300	330
360	35	70	140	205	240	275	310	340
400	40	75	150	225	265	305	345	380
500	50	95	190	285	335	380	430	475
520	50	100	200	300	350	400	450	500

1. For rates not listed on this table, use the buffer zone for the next highest rate, or use the following calculation to determine the exact buffer zone:

$$\text{Buffer Zone for Application Rate Not Listed} = \frac{\text{Known Buffer Zone on Table} \times \text{Application Rate Not Listed}}{\text{Rate of Application for Known Buffer Zone}}$$

2. Buffer Zone Reduction Credits:

Reduce buffer zone by 10% for each factor listed below:

- Use of flat fume/broadcast application
- Use of highly retentive tarps. Highly retentive tarps for which credit can be applied must be on an Arysta approved list. Examples of Arysta approved tarps are Canslit Brand Metalized 1.3 mil, Pliant Blockade® VIF 1.25 mil, or Pliant Metalized 1.0-1.25.
- Application to soils having >3% organic matter Refer to the USDA or USGS Soil Survey Maps for the treated area that identify the range of organic matter and / or a documented soil survey report

that lists range of % organic matter for the treated area. Collection of samples for analysis of soil in the treated area should follow procedures as per USDA's Natural Resource Conservation Services methods. Information on soil sampling can be found at www.soil.usda.gov.

For example, if the Buffer Zone is 50 feet and the application qualifies for a buffer zone reduction credit such as use of highly retentive tarps, then the buffer zone can be reduced by 10%, i.e., reduced by 5 feet based on the following calculation: $50 \text{ ft} - (50 \text{ ft} \times 10\%) = 45 \text{ feet}$.

If the application qualifies for two buffer zone reduction credits such as use of highly retentive tarps and soil with >3% organic matter, then the buffer zone can be reduced by 20%, i.e., reduced by 10 feet based on the following calculation: $50 \text{ ft} - (50 \text{ ft} \times 20\%) = 40 \text{ feet}$.

3. Applications are limited to 40 contiguous acres or less per day.
4. For raised bed applications, the treated area is the raised bed not the untreated furrows. As an example, if a raised bed field is 50% raised bed (treated) and 50% furrow (untreated), and 350 lbs of MIDAS 33:67 is applied to the raised beds of the field, then the effective application rate to the treated raised bed is 350 lbs per treated acre; and that is the rate that would determine the buffer zone.

Note: Minimum allowable buffer zone is 25 feet regardless of buffer zone reduction credits.

Buffer Zone for Tree Replant – Probe or Auger Applications

- 25 feet if the application rate is less than 150 lbs MIDAS 33:67 per acre.
- 50 feet if application rate is 150 to 379 lbs MIDAS 33:67 per acre, and
- 100 feet if the application rate is 380 to 520 lbs MIDAS 33:67 per acre.

GENERAL INFORMATION AND INSTRUCTIONS

This fumigant is a highly hazardous material. All uses of this fumigant are covered under the Worker Protection Standard, and must be conducted in accordance with all of the requirements of the Worker Protection Standard (40 CFR Part 170). It is a restricted use pesticide that must only be used by Certified Applicators, certified by the state and trained by Arysta, in the proper handling, worker protection, and application of MIDAS 33:67 soil fumigant and handlers under their direct supervision. Before using, read the entire label and follow all use directions and precautions. All persons working with this fumigant must be knowledgeable about the hazards and trained in the use of required air-purifying respirator equipment and detector devices, emergency procedures and proper use of the fumigant.

Control of Soil-Borne Pests: MIDAS 33:67 controls soil-borne pests including nematodes, insects, weed seeds, and diseases.

MIDAS 33:67 will control the following pests when present in soil at the time of treatment:

Weed Seeds, including broadleaf weeds such as nutsedge, pigweed, broomrape and lambsquarters, and grasses such as bermudagrass, and annual bluegrass. Effectiveness against hard seed weeds, such as mallow, dodder, morning glory, and certain leguminous weeds may be variable.

Plant-parasitic Nematodes, such as root-knot, root lesion (meadow), cyst, citrus, burrowing, false root-knot, lance, spiral, ring, stubby root, dagger, awl, sheath and sting (stylet) nematodes.

Soil-borne Insects, such as wireworms, cutworms, grubs, rootworms, ants and garden symphylans.

Soil-borne Diseases, such as *Verticillium*, *Pythium*, *Rhizoctonia*, *Phytophthora*, and *Fusarium*.

MIDAS 33:67 is not to be used as a preventative treatment for pests that may be introduced after the fumigant has been applied and/or tarps removed. To reduce the potential for the re-introduction of pests (nematodes, weed seed and disease); avoid the use of irrigation water, transplants or equipment that

could carry pests into the planting area. Avoid moving infested soil back into the treated area through cultivation or other means.

GENERAL USE PRECAUTIONS

- Follow all local government instructions for posting of treated areas and post all treated areas with warning signs.
- Comply with all local ordinances and regulations.
- Do not apply within ¼ mile of nursing homes, hospitals or prisons; or licensed schools, licensed day care facilities or licensed assisted living facilities (licensed by state or local governments) that will be occupied during the buffer zone period.
- Applications are limited to 40 contiguous acres or less per day.
- Never fumigate alone. A minimum of two persons must be present during handling and application of soil fumigants.
- Additional instructions must be made available to handlers in the mechanical operation of the tractor and how to safely work with the operator while fumigating.
- Always handle this product in the open, with all handlers positioned "upwind" from the container and/or where there is adequate ventilation.
- When fumigating from a tractor, it is required that 5 gallons of water be carried on the tractor and readily available for rinsing and cleaning purposes. An additional 5 gallons of water must be available in the service truck. This water must be potable and in containers marked "Decontamination water not to be used for drinking."
- For broadcast/flat fume applications, keep all pets, livestock and other domestic animals out of the treated areas until tarps have been removed.
- For raised bed applications, keep all pets, livestock and other domestic animals out of the treated areas for 5 days. Most raised bed applications will not result in tarp removal.
- Do not allow entry by unprotected persons into the fumigated area until the Fumigant Treated Area signs are removed.

SPILL AND LEAK PROCEDURES

- For Spill and Leak PPE requirements refer to the Personal Protective Equipment, All Handlers (including applicators) while performing tasks with liquid contact potential section on this label.
- Cease all operations if any leak develops in the fumigation system.
- Evacuate everyone from the immediate area of the spill or leak.
- Approach the area from the upwind side. Work upwind to repair leak(s), if possible.
- Only correctly trained and PPE-equipped handlers are permitted to enter. Do not permit entry into the spill or leak area by any other person until the concentration of chloropicrin is measured to be less than 0.15 ppm.
- Allow spilled fumigant to evaporate or to absorb onto vermiculite, dry sand, earth, or similar absorbent material. Such material should be disposed of on site or at an approved disposal facility.
- Contaminated soil, water and other cleanup debris may be hazardous waste. Report any spill that exceeds 302 lbs (20 gallons of product) to the National Response Center at 1-800-424-8802.

SITE-SPECIFIC FUMIGATION MANAGEMENT PLAN (FMP)

Prior to the start of fumigation, the Certified Applicator supervising the application must verify that a site-specific FMP exists for each application block (i.e., a field or portion of a field treated with a fumigant in any 24-hour period). In addition, an agricultural operation fumigating multiple application blocks may

format the FMP in a manner whereby all of the information that is common to all the application blocks is captured once, and any information unique to a particular application block or blocks is captured in subsequent sections.

The FMP must be prepared by the Certified Applicator, the site owner/operator, registrant or other party.

The Certified Applicator must verify in writing (sign and date) that the site-specific FMP(s) reflects current site conditions before the start of fumigation.

Each site-specific FMP must contain the following elements:

- Applicator information (name, phone number, pesticide applicator license and/or certificate number, employer name, employer address)
- General site information
 - Application block location (e.g., county, township-range-section quadrant), address, or global positioning system (GPS) coordinates
 - Name, address, and phone number of owner/operator of the application block
 - Diagrams and maps
 - Identify nursing homes, hospitals, prisons, licensed schools, licensed day care facilities, or licensed assisted living facilities (licensed by state or local governments) with ¼ mile of the fumigated area, and document how it was determined that such sites would be unoccupied during the application period.
- General application information (target application date/window, brand name of fumigant, EPA registration number)
- Tarp information and procedures for repair, perforation, and removal (if tarp is used)
 - Brand name, lot number, thickness
 - Name and phone number of person responsible for repairing tarps
 - Schedule for checking tarps for damage, tears, and other problems
 - Maximum time following notification of damage that the person(s) responsible for tarp repair will respond
 - Minimum time following application that tarp will be repaired
 - Minimum size of damage that will be repaired
 - Other factors used to determine when tarp repair will be conducted
 - Name and phone number of person responsible for perforating and/or removing tarps (if other than Certified Applicator)
 - Equipment/methods used to perforate tarps
 - Schedule and target dates for perforating tarps
 - Schedule and target dates for removing tarps
- Soil conditions (description of soil texture in application block, method used to determine soil moisture)
- Weather conditions (summary of forecasted conditions for the day of the application and the 48-hour period following the fumigant application)
 - Wind speed
 - Inversion conditions (e.g., shallow, compressed (low-level) temperature inversion)
 - Air stagnation advisory
- Buffer Zones
 - Application method
 - Application rate (pounds of Midas 33:67)
 - Application block size (acres)
 - Credits applied
 - Description of areas in the buffer zone that are not under the control of the owner/operator of the application block and how it was verified that these structures were unoccupied during the buffer zone period, including any consent documentation signed by parties whose properties were outside the control of the Certified Operator but were included in the buffer zone.
- Air-purifying respirators, air-rescue devices, and other personal protective equipment (PPE) for handlers (handler task, protective clothing, air-purifying respirator type, respirator cartridge type,

respirator cartridge replacement schedule, air-rescue device type, eye protection, gloves, other PPE)

- Emergency procedures (evacuation routes, locations of telephones, contact information for first responders, local/state/federal/tribal contacts, key personnel and emergency procedures/responsibilities in case of an incident, equipment/tarp/seal failure or complaints, or other emergencies).
- Fumigant Treated Area and/or Buffer Zone (if used) posting procedures [person(s) who will post Fumigant Treated Area and/or Buffer Zone (if used) signs, location of Fumigant Treated Area and/or Buffer Zone (if used) signs, procedures for Fumigant Treated Area and/or Buffer Zone (if used) sign removal].
- Plan describing how communication will take place between the applicator, land owner/operator, and other on-site handlers (e.g., tarp perforators/removers, irrigators) for complying with label requirements (e.g., timing of tarp perforation and removal, PPE, buffer zone location).
 - Name and phone number of persons contacted
 - Date contacted
- Authorized on-site personnel
 - Names, addresses and phone numbers of handlers
 - Names, addresses and phone numbers for employees of handlers
 - Tasks that each handler is authorized and trained to perform
 - For handlers designated to wear air-purifying respirators:
 - date of medical qualification to wear an air-purifying respirator
 - date of air-purifying respirator training, and
 - date of fit-testing for the air-purifying respirator.
- Air monitoring plan
 - If sensory irritation is experienced, indicate whether operations will be ceased or operations will continue with an air-purifying respirator
 - If the intention is to cease operations when sensory irritation is experienced, provide the name, address, and phone number of the handler that will perform monitoring activities prior to operations resuming
 - When air-purifying respirators are worn:
 - Representative handler tasks to be monitored
 - Monitoring equipment to be used and timing of monitoring
- Good Agricultural Practices (GAPs)
 - Description of applicable mandatory GAPs
 - Measurements and documentation to ensure GAPs are achieved (e.g., measurement of soil and other site conditions)
- Description of hazard communication. (The application block has been posted in accordance with the label. Non-handlers are excluded from the buffer zone. Pesticide product labels and material safety data sheets are on-site and readily available for employees to review.)
- Record-keeping procedures (the owner/operator of the application block as well as the Certified Applicator must keep a signed copy of the site-specific FMP for 2 years from the date of application).

For situations where an initial FMP is developed and certain elements do not change for multiple fumigation sites (e.g., applicator information, authorized on-site personnel, record-keeping procedures, emergency procedures) only elements that have changed need to be updated in the site-specific FMP provided the following:

- The Certified Applicator supervising the application has verified that those elements are current and applicable to the application block before it is fumigated.
- Record-keeping requirements are followed for the entire FMP (including elements that do not change).

Once the application begins, the Certified Applicator must make a copy of the FMP available for viewing by handlers involved in the fumigation. The Certified Applicator or the owner operator of the application block must provide a copy of the FMP to any local/state/federal/tribal enforcement personnel who request

the FMP. In the case of an emergency, the FMP must be made immediately available when requested by local/state/federal/tribal emergency response and enforcement personnel.

Within 30 days of completing the application portion of the fumigation process, the Certified Applicator supervising the application must complete a post-application summary that describes any deviations from the FMP that have occurred, measurements taken to comply with GAPs, monitoring results as well as any complaints and/or incidents that have been reported to him/her.

The Post-Application Summary must contain the following elements:

- Actual date of the application, application rate, and size of application block fumigated
- Summary of weather conditions on the day of the application and during the 48-hour period following the fumigant application
- Soil temperature measurement (if air temperatures were above 100° F in any of the 3 days prior to the application)
- Tarp damage and repair information (if applicable)
 - Location and size of tarp damage
 - Description of tarp/tarp seal/tarp equipment failure
 - Date and time of tarp repair
- Tarp perforation/removal details (if applicable)
 - Description of tarp removal (if different than in the FMP)
 - Date tarps were perforated
 - Date tarps were removed
- Vacating occupied structures within the buffer zone
 - Dates and times people left occupied structures within the buffer zone; and when they allowed them to return to such structures.
- Complaint details (if applicable)
 - Person filing complaint (e.g., on-site handler, person off-site)
 - If off-site person, name, address, and phone number of person filing complaint
 - Description of control measures or emergency procedures followed after complaint.
- Description of incidents, equipment failure or other emergency, and emergency procedures followed (if applicable)
- Details of elevated air concentrations monitored on-site (if applicable)
 - Location of elevated air concentration levels
 - Description of control measures or emergency procedures followed
 - Air monitoring results
 - When sensory irritation experienced:
 - Date and time of sensory irritation
 - Handler task/activity
 - Handler location where irritation was observed
 - Resulting action (e.g., cease operations, continue operations with air-purifying respirators)
 - When using a direct read instrument:
 - Sample date and time
 - Handler task/activity
 - Handler location
 - Air concentration
 - Sampling method
- Date of Fumigant Treated Area sign removal
- Date of Buffer Zone sign removal (if used)
- Any deviations from the FMP
- Record-keeping procedures (the owner/operator of the application block as well as the Certified Applicator must keep a signed copy of the post-application summary for 2 years from the date of application).

MANDATORY GOOD AGRICULTURAL PRACTICES (GAPs)

The following GAPs must be followed during all fumigant applications. All measurements and other documentation planned to ensure that the mandatory GAPs are achieved must be recorded in the FMP and/or post-application summary.

- MIDAS 33:67 must be transferred through connecting hoses, pipes, and/or couplings sufficiently tight to prevent workers or other persons from coming in contact with the liquid.
- All hoses, piping, and tanks used in connection with this product shall be of a type appropriate for use under the pressure and vacuum conditions to be encountered.
- Hoses between any fumigant container and the flow divider must be Teflon® hoses reinforced with stainless steel wire braid or its equivalent.
- External sight gauges, if applicable, shall be equipped with a valve so that pipes to sight gauge can be shut off in case of breakage or leakage.
- The mechanical transfer system must be adequate to make necessary measurements of the pesticide being used.
- Shut-off devices must be installed on the exit end of all cylinder connections and at all disconnect points to prevent leakage of product when the transfer is stopped and hose is removed or disconnected.
- The pressure in hoses used to move the product must not exceed the manufacturer's maximum pressure specifications.
- Check equipment to ensure good condition and integrity prior to each use.

Tarps (are required for all Midas 33:67 applications except for Tree Replant – Probe or Auger Applications). Tarps must be installed immediately after the fumigant is applied to the soil.

- A written tarp plan must be developed and included in the FMP. The plan must include:
 - schedule and procedures for checking tarps for damage, tears, and other problems
 - plans for determining when and how repairs to tarps will be made, and by whom
 - minimum time following injection that tarp will be repaired
 - minimum size of tarp damage that will be repaired
 - other factors used to determine how and when tarp repair will be conducted
 - schedule, equipment, and methods used to perforate tarps
 - aeration plans and procedures following perforation of tarp, but prior to tarp removal or planting/transplanting
 - schedule, equipment, and procedures for tarp removal

Weather Conditions

- Prior to fumigation the weather forecast for the day of the application and the 48-hour period following the fumigation must be checked to determine if unfavorable weather conditions exist (see **Identifying Unfavorable Weather Conditions** section) or are predicted and whether fumigation should begin.
- Wind speed at the application site must be a minimum of 2 mph at the start of the application or forecasted to reach at least 5 mph during the application.
- Do not apply if a shallow, compressed (low-level) temperature inversion is forecast to persist for more than 18 consecutive hours for the 48-hour period after the start of application, or if there is an air stagnation advisory issued by the National Weather Service in effect for the area in which the fumigation is planned.
- Detailed local forecasts for weather conditions, wind speed, and air stagnation advisories may be obtained on-line at: <http://www.nws.noaa.gov>, or by contacting your local National Weather Service Forecasting Office.
- **Identifying Unfavorable Weather Conditions** - Unfavorable weather conditions block upward movement of air, which results in trapping fumigant vapors near the ground. The resulting air mass can move off-site in unpredictable directions. These conditions typically exist prior to sunset and continue past sunrise and persist as late as noontime. Unfavorable conditions are

common on nights with limited cloud cover and light to no wind and their presence can be indicated by ground fog or smog and can also be identified by smoke from a ground source that flattens out below a ceiling layer and moves laterally in a concentrated cloud.

Soil Preparation

- Soil must be properly prepared and at the surface generally be free of large clods. The area to be fumigated must be tilled to a depth of at least 5 to 8 inches.
- Field trash must be properly managed. Residue from a previous crop must be worked into the soil to allow for decomposition prior to fumigation. Little or no crop residue shall be present on the soil surface. Crop residue that is present must not interfere with the soil seal. Removing the crop residue prior to fumigation is important to limit the natural "chimneys" that occur in the soil when crop residue is present. These "chimneys" allow the soil fumigants to move through the soil quickly and escape into the atmosphere. This may create potentially harmful conditions for workers and bystanders and limit the efficacy of the fumigant. However, crop residue on the field serves to prevent soil erosion from both wind and water and is an important consideration. To accommodate erosion control, fumigant efficacy, and human health protection, clear fields of crop residue as close to the timing of the fumigation as possible to limit the length of time that the soil would be exposed to potentially erosive weather conditions.

Prior to All Applications:

- Ensure that application equipment does not contain components made of natural rubber, aluminum, magnesium or their alloys.

During All Applications:

- Do not change cylinders when the fumigant system is under pressure. Change cylinders with all cylinder valves in the off position.

Following All Applications:

- To minimize the potential for crop injury, allow the fumigant to dissipate before planting a crop. Seeds may be used as a bioassay to determine if MIDAS 33:67 is present in the soil at concentrations sufficient to cause plant injury. See fumigation tables for planting requirements specific to the different application methods.
- Fumigation of highly acidic soils or those high in organic matter can cause ammonia toxicity to plants and or elevated levels of soluble salts in the soil causing phytotoxicity. Analyze soil following fumigation and fertilize as indicated. Avoid those fertilizers using ammonium salts.
- When using standard tarps, planting shall not occur for at least 10 days after application.
- When using highly retentive tarps, planting shall not occur for at least 14 days after application.

MANDATORY GOOD AGRICULTURAL PRACTICES (GAPs) FOR MIDAS 33:67 BEDDED AND BROADCAST SHANK APPLICATIONS

In addition to the GAPs required for all Midas 33:67 soil fumigation applications, the following GAPs apply for bedded and broadcast shank injection applications:

Soil Preparation

- Allow time for complete voiding of material in the buried shanks following the closure of the shutoff valve and before removing the shanks from the soil.
- In the event that trash is pulled up with the shanks after completing a treatment pass, the trash must be covered with the tarp and the edges of the tarp must be buried under at least 4 inches of compacted soil before making the next pass through the field.

Soil Temperature

- The soil temperature at the depth of injection must not be less than 55° F or exceed 90° F at the beginning of the application.
- If air temperatures have been above 100° F in any of the three days prior to application, then soil temperature must be measured and recorded in the FMP.

Soil Moisture

- The soil must be moist 9 inches below the surface. The amount of moisture needed will vary according to the soil type. Surface soil generally dries rapidly and must not be considered in this determination.
- Soil moisture must be determined by one of the following methods:
 - The USDA Feel and Appearance Method for testing, or
 - An instrument, such as a tensiometer.
- If there is insufficient moisture 9 inches below the surface, the soil moisture must be adjusted. If irrigation is not available and there is adequate soil moisture below 9 inches, soil moisture can be adjusted by discing or plowing before fumigant injection. To conserve existing soil moisture, pretreatment irrigation or pretreatment tillage should be done as close to the time of application as possible.
- Measure soil moisture at a depth of 9 inches at either end of the field, no more than 48 hours prior to application.

Soil moisture determination using the USDA Feel and Appearance Method

- For **coarse** textured soils (fine sand and loamy fine sand) there must be enough moisture (50 to 75 percent available soil water moisture/50 to 75 percent of field capacity) so the soil is moist, forms a weak ball with loose and clustered sand grains on fingers, darkened color, moderate water staining on fingers; will not ribbon.
- For **moderately coarse** textured soils (sandy loam and fine sandy loam) there must be enough moisture (50 to 75 percent available soil water moisture/50 to 75 percent of field capacity) so the soil is moist, forms a ball with defined finger marks, very light soil/water staining on fingers, darkened color will not stick.
- For **medium** textured soils (sandy clay loam, loam, and silt loam) there must be enough moisture (50 to 75 percent available soil water moisture/50 to 75 percent of field capacity) so the soil is moist, forms a ball, very light staining on fingers, darkened color, pliable, and forms a weak ribbon between the thumb and forefinger.
- For **fine** textured soils (clay, clay loam, and silty clay loam) there must be enough moisture (50 to 75 percent available soil water moisture/50 to 75 percent of field capacity) so the soil is moist, forms a smooth ball with defined finger marks, light soil/water staining on fingers, ribbons between thumb and forefinger.
- For **fields with more than one soil texture**, soil moisture content in the lightest textured (most sandy) areas must comply with this soil moisture requirement. Whenever possible, the field should be divided into areas of similar soil texture and the soil moisture of each area should be adjusted as needed. Coarser textured soils can be fumigated under conditions of higher soil moisture than finer textured soils; however, if the soil moisture is too high, fumigant movement will be retarded and effectiveness of the treatment will be reduced. Previous and/or local experience with the soil to be treated or the crop to be planted can often serve as a guide to conditions that will be acceptable. If there is uncertainty in determining the soil moisture content of the area to be treated, a local extension service agent, soil conservation service specialist, or pest control advisor (agriculture consultant) should be consulted for assistance.

Application Depth

- **For Tarped-Broadcast and Tarped-Bedded Applications:** The injection point must be a minimum of 6 inches from the nearest final soil/air interface. The application depth in preformed beds must not be below the bed furrow.

Prevention of End Row Spillage

- Do not apply or allow fumigant to spill onto the soil surface. For each injection line either have a check valve located as close as possible to the final injection point, or drain/purge the line of any remaining fumigant prior to lifting injection shanks from the ground.
- Do not lift injection shanks from the soil until the shut-off valve has been closed and the fumigant has been depressurized (passively drained) or purged (actively forced out via air compressor) from the system.

Calibration, Set-up, Repair and Maintenance for Application Rigs

- Brass, carbon steel or stainless steel fittings must be used throughout. Polyethylene tubing, polypropylene tubing, Teflon® tubing or Teflon®-lined steel braided tubing must be used for all low pressure lines, drain lines, and compressed gas or air pressure lines. All other tubing must be Teflon®-lined steel braided.
- Galvanized, PVC, nylon or aluminum pipe fittings must not be used.
- All rigs must include a filter to remove any particulates from the fumigant, and for pressurized systems, a check valve to prevent backflow of the fumigant into the pressurizing cylinder or the compressed air system
- Rigs must include a flowmeter or a constant pressure system with orifice plates to insure the proper amount of fumigant is applied.
- To prevent the backflow of fumigant into the compressed gas cylinder (e.g., nitrogen, other inert gas, compressed air), if used, applicators must:
 - When applying MIDAS 33:67 from steel cylinders using compressed gas, ensure that positive pressure is maintained in the cylinder at not less than 80 psi during the entire time it is connected to the application rig. *(This is not required for a compressed air system that is part of the application rig because if the compressor system fails the application rig will not be operable).*
 - When applying MIDAS 33:67 from drum-in-drum poly-totes, using compressed gas, maintain a positive pressure of not less than 35 psi during the entire time it is connected to the application rig. *(This is not required for a compressed air system that is part of the application rig because if the compressor system fails the application rig will not be operable).*
 - Ensure that application rigs are equipped with properly functioning check valves between the compressed gas cylinder or compressed air system and the fumigant cylinder. The check valve is best placed on the outlet side of the pressure regulator, and is oriented to only allow compressed gas to flow out of the cylinder or compressed air out of the compressed air system.
 - Always pressurize the system with compressed gas or by use of a compressed air system before opening the fumigant cylinder valve.
- Before using a fumigation rig for the first time, or when preparing it for use after storage, the operator must check the following items carefully:
 - Check the filter, and clean or replace the filter element as required.
 - Check all tubes and chisels to make sure they are free of debris and obstructions.
 - Check and clean the orifice plates and screen checks, if installed.
 - Pressurize the system with compressed gas or compressed air, and check all fittings, valves, and connections for leaks using soap solution.
- Install the fumigant cylinder, and connect and secure all tubing. Slowly open the compressed gas or compressed air valve, and increase the pressure to the desired level. Slowly open the fumigant cylinder valve, always watching for leaks.
- When the application is complete, close the fumigant cylinder valve and blow residual fumigant out of the fumigant lines into the soil using compressed gas or compressed air. At the end of the application, disconnect all fumigant cylinders from the application rig. At the end of the season, seal all tubing openings with tape to prevent the entry of insects and dirt.

Application equipment must be calibrated and all control systems must be working properly. Proper calibration is essential for application equipment to deliver the correct amount of fumigant uniformly to the soil. Refer to the manufacturer's instructions on how to calibrate your equipment, usually the equipment manufacturer, fumigant dealer, or Cooperative Extension Service can provide assistance.

Soil Sealing

Raised Bed Applications

- Use tractor mounted chisels spaced no more than 12 inches apart. Injections spacing of 12 inches or less is typically performed with a multiple shank applicator. The treated ground must be sealed using either:

- Soil sealing at the time of application: The treated ground must be sealed using closing shoes, roller, compaction roller, cultipacker, or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarp (with fumigant injection) by tarp-laying equipment mounted on the application tractor; or
- Bed shaper: The chisels shall be placed with the injection point under the bed shaper, and the tarp shall be laid down simultaneously (with fumigant injection) by tarp-laying equipment mounted on the application tractor; or
- Combination bed former and bed shaper: The chisels shall be placed between the bed former and the bed shaper. The tractor with the tarp-laying equipment shall immediately follow the application tractor.

Broadcast/Flat Fume Applications

- Use tractor mounted chisels spaced no more than 12 inches apart.
 - Soil sealing at time of application: The treated ground must be sealed using closing shoes, roller, compaction roller, cultipacker or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarp (with fumigant injection) by tarp-laying equipment mounted on the application tractor.

TREE REPLANT – PROBE OR AUGER APPLICATION: MANDATORY GAPs

This application method is used when MIDAS 33:67 is applied to individual tree sites in an existing orchard where shank applications are not possible.

In addition to the GAPs required for all MIDAS 33:67 soil fumigation applications, the following GAPs apply for MIDAS 33:67 tree replant – probe or auger applications:

Site Preparation

- Remove the tree stump and primary root system in each individual tree-site with a back-hoe or other similar equipment, for example an auger.
- The hole must be backfilled with soil before application.

Application Depth

- The fumigant must be injected at least 18 inches into the soil, typically between 18 and 36 inches.

System Flush

- Before removing the application wand from the soil the wand must be cleared using nitrogen or compressed air.

Soil Sealing

- After the wand is cleared and removed from the soil, the injection hole must be either covered with soil and tamped; or the soil must be compacted over the injection hole.

MIDAS 33:67 PRE-PLANT FIELD FUMIGATION METHODS

Fumigation with MIDAS 33:67 shall only be performed in accordance with the following three application techniques: 1) Raised Bed Application, 2) Broadcast/Flat Fume Application, or 3) Tree Replant – Probe or Auger Application (stone fruit, nut trees, vines, and field-grown ornamentals only). Application methods and rates of application for each of these methods are discussed in detail below.

Application Rates for Raised Bed Fumigation: Rates in the table below are given in pounds of MIDAS 33:67 per broadcast acre. The amount of product applied will be proportionate to the row spacing and width of the raised bed. To calculate the amount of product to be applied, multiply the application rate in

lbs MIDAS 33:67/broadcast acre by the appropriate modifier from the Field Rate Modifier Table provided below.

RAISED BED SOIL FUMIGATION TABLE		
Crop	MIDAS 33:67 Per Broadcast Acre ¹	Time Between Application and Planting ²
Field-Grown Ornamentals Peppers Strawberries Tomatoes	Standard Tarps 300 - 520 lbs/Broadcast Acre (19.9 – 34.4 gal/Broadcast Acre)	10 – 14 days
	Highly Retentive Tarps³ 175-250 lbs/Broadcast Acre 11.6 – 16.6 gal/Broadcast Acre	14 – 21 days when using highly retentive tarps
NOTE: ¹ For fields infested with nutsedge and Malva, apply a minimum of 450 lbs/broadcast acre (29.8 gal/acre) of MIDAS 33:67 with standard tarps and 250 lbs/broadcast acre (16.6 gal/acre) with highly retentive tarps. ² Use the longer planting restriction period under conditions of high soil moisture, heavy soils, or rain. ³ Contact your Arysta LifeScience representative for tarp selection and rate reduction recommendations and approved tarps.		

Field Rate Modifier Table for Raised Bed Applications

Row Spacing (inches)	Bed Width (inches)	Field Rate Modifier
72	40	0.55
72	36	0.50
72	32	0.44
72	30	0.42
72	28	0.39
66	32	0.48
66	30	0.45
66	28	0.42
66	24	0.36
60	30	0.50
60	28	0.47
48	28	0.58

APPLICATION RATES FOR BROADCAST / FLAT FUME FUMIGATION WITH STANDARD TARPS		
Crop	MIDAS 33:67 Per Acre ¹	Time Between Application and Planting
Field-Grown Ornamentals Peppers Strawberries Tomatoes Turf	300 – 520 lbs/Acre (19.9 – 34.4 gal/Acre)	10 – 14 days
Stone Fruits (Apricot, Sweet Cherry, Tart Cherry, Nectarine, Peach, Plum, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot, Fresh Prune) Tree Nuts (Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (Hazelnut), Hickory Nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Black Walnut, English Walnut) Vines (Table, Raisin and Wine Grape)	360- 520 lbs/Acre (23.8 – 34.4 gal/Acre)	10 – 14 days
Nurseries (including strawberries, stone fruits, tree nuts and conifer trees)	520 lbs/Acre (34.4 gal/Acre)	10 – 14 days
NOTE: ¹ For fields infested with nutsedge and Malva apply a minimum of 300 lbs/acre (19.9 gal/acre) of MIDAS 33:67.		

Application Rates for Broadcast/Flat Fume Fumigation with Highly Retentive Tarps

Contact your Arysta LifeScience North America representative for information on approved tarps and rate reduction recommendations for highly retentive tarps. Applications using highly retentive tarps shall not exceed 300 lbs/Acre (19.9 gal/Acre).

Tree Replant – Probe or Auger Application:

For Stone Fruit Trees, Tree Nuts, Vines, and Field Grown Ornamental Trees and Shrubs, use 2 lbs of MIDAS 33:67 per injection site. Use 1 injection site per 100 square feet (i.e., one injection site every 10 feet in a standard grid pattern). Planting or replanting of Stone Fruit Trees, Tree Nuts, Vines, and Field-Grown Ornamental Trees and Shrubs may begin 14 days after treatment. DO NOT PLANT if the odor of chloropicrin is detectable.

Do not treat more than 230 trees/shrubs/vines per acre per day.

ROTATIONAL CROPS

Food crops other than strawberry, tomatoes, and peppers require a 4 month plant back rotation restriction from the date of fumigant application. Crop rotation to non-food crops or non-bearing fruit or nut trees is not restricted.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store in a dry, cool, well-ventilated area under lock and key. When appropriate to prevent tipping, store cylinders upright, secured to a rack or wall. Post as a pesticide storage area.

Handling: Product cylinders shall not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging or sliding. Do not use rope slings, hooks, tongs, or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured.

Do not remove valve protection bonnet and safety cap until immediately before use. When cylinder is not in use, close valve by turning clockwise until hand tight, screw safety cap onto valve outlet, and replace protection bonnet.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Return of Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

This pesticide container, whether full or partially used, is the property of the manufacturer or distributor where it was purchased and must be returned to the distributor of origin. Do not ship containers without safety caps or valve protection bonnets. Containers shall never be refilled by the consumer or used for any other product or purpose.

FOR 24-HOUR CHEMICAL EMERGENCY (spill, leak, fire or accident) ASSISTANCE:

Call CHEMTREC at 1-800-424-9300

Warranty and Disclaimer Statement

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America, LLC ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF

ARYSTA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF ARYSTA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT ARYSTA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.

MIDAS® and the Midas logo are registered trademarks of Arysta LifeScience North America, LLC
Arysta LifeScience and the Arysta LifeScience logo are registered trademarks of Arysta LifeScience, LLC

**RESTRICTED USE PESTICIDE
DUE TO ACUTE TOXICITY**

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

MIDAS® 33:67

FOR SALE AND USE IN STATES OTHER THAN FLORIDA

Only For Pre-Plant Fumigations of Fields Intended for Commercial Production of Listed Crops and Field-Grown Ornamentals, for the Control of Soil-Borne Pests Including Weed Seeds, Nematodes, Insects, and Diseases.

ACTIVE INGREDIENTS:

Iodomethane..... 32.93%

Chloropicrin 66.67%

OTHER INGREDIENTS: 0.40%

TOTAL:..... 100.00%

One gallon weighs 15.1 pounds (5 pounds Iodomethane and 10.1 pounds Chloropicrin).

**KEEP OUT OF REACH OF CHILDREN
DANGER / PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail).

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person.
<p>HOT LINE NUMBERS</p> <p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p> <p>FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL: 1-866-303-6952 or 1-651-632-8946</p>	
<p>NOTE TO PHYSICIAN</p> <p>Probable mucosal damage may contraindicate the use of gastric lavage. Symptoms of overexposure may include irritation to eyes, skin, and respiratory system, shortness of breath, nausea, vomiting, dizziness, ataxia, slurred speech, drowsiness, blurred vision, staggering gait and mental imbalance, with probable recovery after period of no exposure. Treatment is symptomatic.</p>	

EPA Reg. No. 66330-59
EPA Est. No.

For Product Information Call: 1-866-761-9397

Net Contents: _____ LBS.

Manufactured for
Arysta LifeScience North America, LLC
15401 Weston Parkway, Suite 150
Cary, NC 27513

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

Danger. Corrosive. Causes irreversible eye damage. Corrosive to skin. Causes skin burns. May be fatal if inhaled or swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin or on clothing. Do not breathe vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SPECIAL NOTE: This product contains chloropicrin, a poisonous liquid or vapor. Inhalation of vapors may be fatal. Chloropicrin is readily identified by smell. Exposure to very low concentrations of vapor will cause irritation of eyes, nose and throat. Continued exposure after irritation is evident or higher concentrations may cause painful irritation to the eyes or temporary blindness. Liquid will cause chemical burns to skin or eyes. Do not get on skin, in eyes, or on clothing. Chloropicrin fumigant has the capacity to cause marked irritation to the upper respiratory tract and is a strong lachrymator (tear producing eye irritant). Low concentrations, below those necessary to cause serious systemic intoxication, are capable of causing severely painful eye irritation, hence will not be voluntarily tolerated. However, the effect may be so powerful that a person may become temporarily blinded and panic-stricken and that in turn may lead to accidents.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminate or viton \geq 14 mils. For more options, follow the instructions for category H on the chemical-resistance category selection chart.

All Handlers (including applicators) while performing tasks with liquid contact potential (including, but not limited to, supervisors, loaders, tractor drivers, and persons involved with spill recovery, container disposal, and equipment repair when within arm's length proximity and handling, adjusting or securing charged/pressurized lines, supply tubing, cylinders/tanks and other delivery equipment that contains liquid fumigant when cylinder/tank valves are in the open position) **must wear:**

- Loose fitting or well ventilated long-sleeved shirt and long pants,
- Chemical-resistant gloves,
- Chemical-resistant apron,
- Chemical-resistant footwear and socks,
- Full face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles, and
- A half face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C).
- In addition, if sensory irritation (tearing, burning, of the eyes or nose) is experienced while wearing a half-face air-purifying respirator, handlers must wear at a minimum a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C). See Directions for Use, Protection for Handlers, Respiratory Protection

and Stop Work Triggers, number 1: *Handlers Wearing Half-Face Air-Purifying Respirators*, for when a full-face respirator is required.

All Handlers (including applicators) present in either the application block (i.e., a field or portion of a field treated with a fumigant in any 24-hour period) until 5 days (120 hours) after the application is complete (i.e., after tarps have been laid) or the buffer zone during the buffer zone period (to include supervisors, tractor drivers, co-pilots, shovelers, cross ditchers, and tarp monitors) (see exception for transient travel in the Buffer Zone section) must wear:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles.
- A half face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C).
- In addition, if sensory irritation (tearing, burning, of the eyes or nose) is experienced while wearing a half-face air-purifying respirator, handlers must wear at a minimum a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C). See Directions for Use, Protection for Handlers, Respiratory Protection and Stop Work Triggers, number 1: *Handlers Wearing Half-Face Air-Purifying Respirators*, for when a full-face respirator is required.
- For tractor drivers and tractor co-pilots the following can be used in lieu of an air-purifying respirator:
 - A tractor equipped with a working-area air-fan dilution system consisting of a ducted fan/blower which provides air flow to the breathing zone of the tractor driver and co-pilot. The fan/blower must be mounted so that the fan/blower intake is at least 126 inches from the ground, and the fan/blower must be capable of operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.
 - See Directions for Use, Protection for Handlers, Respiratory Protection and Stop Work Triggers, number 2: *Air-Fan Dilution Equipment*, for when a full-face respirator is required.
- Do not wear jewelry, gloves, goggles, tight clothing, rubber protective clothing, or rubber boots when handling. Iodomethane and chloropicrin are heavier than air and can be trapped inside clothing and cause skin injury.

All Handlers (including applicators) present in the application block (i.e., a field or portion of a field treated with a fumigant in any 24-hour period) 5 days (120 hours) after the application is complete (i.e., after tarps have been laid) until the entry restricted period expires (to include planters, hole punchers, tarp cutters, tarp removers, tarp remover drivers, and persons involved with tarp and irrigation repair, air monitoring, scouting/crop advising) must wear:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles.
- In addition, if sensory irritation (tearing, burning, of the eyes or nose) is experienced, handlers must wear at a minimum a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C). See Directions for Use, Protection for Handlers, Respiratory Protection and Stop Work Triggers, number 3: *Handlers in the Application Block 5 days (120 hours) after the Application is Complete until the Entry Restricted Period Expires*, for when a full-face respirator is required.
- Do not wear jewelry, gloves, goggles, tight clothing, rubber protective clothing, or rubber boots when handling. Iodomethane and chloropicrin are heavier than air and can be trapped inside clothing and cause skin injury.

IMPORTANT: an air-supplying respirator [i.e., a respirator connected directly to a clean air source or a self-contained breathing apparatus (SCBA)] is not permitted for routine handler tasks. Such respirators are only permitted in emergencies such as a spill or leak or when corrective action is needed to reduce air levels to acceptable levels.

User Safety Requirements

- Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.
- Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing and gloves, if worn, immediately if pesticide gets inside, then wash skin thoroughly and put on clean clothing and gloves, if worn.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to mammals and birds. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate. Iodomethane and chloropicrin have certain properties and characteristics in common with chemicals that have been detected in ground water (iodomethane and chloropicrin are highly soluble in water and have low adsorption to soil).

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat, open flames, or sparking electrical equipment. Do not use application devices containing natural rubber, aluminum, magnesium or their alloys.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during the application.

For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), restricted entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

For the entry restricted period and notification requirements, see the **Entry Restricted Period and Notification** sections of this labeling.

PPE for Entry During the Entry Restricted Period: PPE for entry that is permitted by this labeling is listed in the Hazards to Humans and Domestic Animals section of this labeling.

HANDLERS

The following activities are prohibited from being performed in the application block (i.e., the field or portion of a field treated with a fumigant in any 24-hour period) by anyone other than persons who have been appropriately trained and equipped as handlers in accordance with the requirements in the Worker Protection Standard (40 CFR Part 170), from the start of the application until the entry restricted period ends (NOTE: persons installing, perforating, removing, repairing, and monitoring tarps are considered handlers for the durations listed below). Those activities include those persons:

- Participating in the application as supervisors, loaders, drivers, tractor co-pilots, shovelers, cross ditchers, or as other direct application participants (the application starts when the fumigant is first introduced into the soil and ends after the fumigant has stopped being delivered/dispensed to the soil);
- Using devices to take air samples to monitor fumigant air concentrations;
- Cleaning up fumigant spills (this does not include emergency personnel not associated with the fumigation application);
- Handling or disposing of fumigant containers;
- Cleaning, handling, adjusting, or repairing the parts of fumigation equipment that may contain fumigant residues;
- Installing, repairing, operating, or removing irrigation equipment in the fumigant application block;
- Entering the application site to perform scouting, crop advising, or monitoring tasks;
- Installing, perforating (cutting, punching, slicing, poking), removing, repairing, or monitoring tarps:
 - until 14 days after application is complete if tarps are not perforated and removed during those 14 days, or
 - until tarp removal is complete if tarps are **both** perforated **and** removed less than 14 days after application, or
 - until 48 hours after tarp perforation is complete if they will not be removed within 14 days after application.

NOTE: see Tarp Perforation and/or Removal section on this labeling for requirements about when tarps are allowed to be perforated.

- Performing any handling tasks as defined by the WPS.

PROTECTION FOR HANDLERS

Respiratory Protection and Stop Work Triggers

1. Handlers Wearing Half-Face Air-Purifying Respirators

The following procedures must be followed to determine whether a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent, is required or if operations must cease for handlers wearing a half-face air-purifying respirator:

- If at any time any handler experiences sensory irritation (tearing, burning of the eyes or nose) while wearing a half-face air-purifying respirator:

- A full-face air-purifying respirator must be worn by all handlers who remain in the application block and/or buffer zone, **or**
- Operations must cease and handlers not wearing full-face air-purifying respirators must leave the application block and/or buffer zone.
- When full-face air-purifying respirators are worn, then air-monitoring samples for chloropicrin must be collected at least every 2 hours in the breathing zone of a handler performing a representative handling task.
- When using monitoring devices to monitor air concentration levels, a direct reading detection device, such as a Matheson-Kitagawa, Dräger, or Sensidyne device must be used. The devices must have a sensitivity of at least 0.15 ppm for chloropicrin.
- When breathing zone samples are required, they must be taken outside respiratory protection equipment and within a ten inch radius of the handler's nose and mouth.
- If at any time (1) a handler experiences any sensory irritation when wearing a full-face air-purifying respirator; or (2) an air sample is greater than or equal to 1.5 ppm, then all handler activities must cease and handlers must be removed from the application block and buffer zone. If operations cease, the emergency plan detailed in the FMP must be implemented.
- Handlers can remove full-face air-purifying respirators or resume work activities if all of the following conditions exist provided that a half-face air-purifying respirator is worn:
 - Two consecutive breathing zone samples for chloropicrin taken at the handling site at least 15 minutes apart must be less than 1.5 ppm;
 - Handlers do not experience sensory irritation; and
 - Air-purifying respirator cartridges have been changed.
 - During the collection of air samples a full-face air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.

2. Air Fan Dilution Equipment

The following procedures must be followed to determine whether a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent, is required or if operations must cease for tractor drivers and tractor co-pilots using a tractor equipped with a working-area air-fan dilution system:

- If at any time tractor drivers and/or tractor co-pilots experience sensory irritation (tearing, burning of the eyes or nose) then either:
 - A full-face air-purifying respirator must be worn by all tractor drivers and tractor co-pilots who remain in the application block and/or buffer zone **or**
 - Operations must cease and tractor drivers and tractor co-pilots not wearing respiratory protection must leave the application block and/or buffer zone.
- When full-face air-purifying respirators are worn, then air monitoring samples must be collected at least every two hours in the breathing zone of a representative tractor driver or tractor co-pilot.
- When using monitoring devices to monitor air concentration levels, a direct reading detection device, such as a Matheson-Kitagawa, Dräger, or Sensidyne device, must be used. The devices must have a sensitivity of at least 0.15 ppm for chloropicrin.
- When breathing zone samples are required, they must be taken outside respiratory protection equipment and within a ten inch radius of the handler's nose and mouth.
- Tractor drivers and co-pilots can resume work activities without full-face air-purifying respirators if all of the following conditions exist:
 - Two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show levels of chloropicrin have decreased to less than 0.15 ppm;
 - Tractor drivers and tractor co-pilots do not experience sensory irritation; and
 - The air-fan dilution system is operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.
 - During the collection of air samples a full-face air purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.
- If at any time (1) a tractor driver and/or tractor co-pilot experiences any sensory irritation when wearing a full-face air-purifying respirator, or (2) an air sample is greater than or equal to 1.5 ppm,

then all activities must cease and tractor drivers and tractor co-pilots must be removed from the application block and/or buffer zone. If operations cease, the emergency plan detailed in the FMP must be implemented.

- Work activities can resume if all of the following conditions exist provided that a full-face air-purifying respirator is worn:
 - Two consecutive chloropicrin breathing zone samples taken at the handling site at least 15 minutes apart must be less than 1.5 ppm, but are greater than 0.15 ppm;
 - Tractor drivers and tractor co-pilots do not experience sensory irritation while wearing the full-face air-purifying respirator;
 - Respirator cartridges have been changed; and
 - The air-fan dilution system is operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.
 - During the collection of air samples, a full-face air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.

3. Handlers in the Application Block 5 days (120 hours) after the Application is Complete until the Entry Restricted Period Expires

The following procedures must be followed to determine whether a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent, is required or if operation must cease for handlers in the application block after the application is complete

- If at any time any handler experiences sensory irritation (tearing, burning of the eyes or nose) then either:
 - A full-face air-purifying respirator must be worn by all handlers who remain in the application block **or**
 - Operations must cease and handlers not wearing respiratory protection must leave the application block.
- Handlers can remove full-face air-purifying respirators or resume operations if two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show that levels of chloropicrin have decreased to less than 0.15 ppm provided that handlers do not experience sensory irritation. During the collection of air samples, a full-face air-purifying respirator must be worn by the handler taking air samples. Samples must be taken where the sensory irritation is first experienced.
- When using monitoring devices to monitor air concentration levels, a direct reading detection device, such as a Matheson-Kitagawa, Dräger, or Sensidyne device, must be used. The devices must have a sensitivity of at least 0.15 ppm for chloropicrin.
- When breathing zone samples are required, they must be taken outside respiratory protection equipment and within a ten inch radius of the handler's nose and mouth.
- When full-face air-purifying respirators are worn, then air monitoring samples must be collected at least every two hours in the breathing zone of a handler performing a representative handling task.
- If at any time (1) a handler experiences any sensory irritation when wearing a full-face air-purifying respirator, or (2) an air sample is greater than or equal to 1.5 ppm, then all handler activities must cease and handlers must be removed from the application block. If operations cease, the emergency plan detailed in the FMP must be implemented.
- Handlers can resume work activities without full-face air-purifying respirators if two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show levels of chloropicrin have decreased to less than 0.15 ppm, provided that handlers do not experience sensory irritation. During the collection of air samples a full-face air purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.
- Work activities can resume if all of the following conditions exist provided that a full-face air-purifying respirator is worn:
 - Two consecutive chloropicrin breathing zone samples taken at the handling site at least 15 minutes apart must be less than 1.5 ppm, but are greater than 0.15 ppm;

- Handlers do not experience sensory irritation while wearing the full-face air-purifying respirator; and
- Cartridges have been changed.
- During the collection of air samples, a full-face air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.

Supervision of Handlers

For all applications: From the start of the application until the fumigant has stopped being delivered/dispensed into the soil, i.e., after the soil is sealed, an Arysta trained and state certified applicator must be at the fumigation site in the line of sight of the application and must directly supervise all persons performing handling activities.

For handling activities that take place after the fumigant has been delivered/dispensed into the soil until the entry restricted period expires, the Certified Applicator does not have to be on-site, but must have communicated, in a manner that can be understood, to the site owner/operator and handlers responsible for carrying out those activities the information necessary to comply with the label and procedures described in the FMP (e.g., emergency response plans and procedures). Communication activities must be captured in the FMP.

IMPORTANT: This requirement does not override the requirements in the Worker Protection Standard for Agricultural Pesticides for information exchange between owners/operators of agricultural establishments and commercial pesticide applicators.

The Certified Applicator must provide **Fumigant Safe Handling** information to each handler involved in the application or confirm that each handler participating in the application has received **Fumigant Safe Handling** information in the past 12 months. **Fumigant Safe Handling** information will be provided where the product is purchased, or at (insert EPA website).

For all handling tasks at least two handlers trained under the provisions of the WPS 40 CFR 170.230 must be present.

Respirator Fit Testing, Medical Qualification and Training

Employers must verify that any handler who uses a respirator is:

- Fit-tested and fit-checked using a program that conforms to OSHA's requirements (see 29 CFR Part 1910.134)
- Trained using a program that conforms to OSHA's requirements (see 29 CFR Part 1910.134)
- Examined by a qualified medical practitioner to ensure physical ability to safely wear the style of respirator to be worn. A qualified medical practitioner is a physician or other licensed health care professional who will evaluate the ability of a worker to wear a respirator. The initial evaluation consists of a questionnaire that asks about medical conditions (such as a heart condition) that would be problematic for respirator use. If concerns are identified, then additional evaluations, such as a physical exam, might be necessary. The initial evaluation must be done before respirator use begins. Handlers must be reexamined by a qualified medical practitioner if their health status or respirator style or use-conditions change. Upon request by local/state/federal/tribal enforcement personnel, employers must provide documentation demonstrating how they have complied with these requirements.

Providing, Cleaning and Maintaining PPE

The employer of any handler (as stated in this label) must make sure that all handlers are provided and correctly wear the required PPE. The PPE must be cleaned and maintained as required by the Worker Protection Standard for Agricultural Pesticides.

Air-Purifying Respirator Availability

At a minimum two handlers must have the appropriate air-purifying respirator and cartridges available and these handlers must be fit-tested, trained and medically examined.

The employer of any handler must confirm that an air-purifying respirator and appropriate cartridges of the type specified in the PPE section of this labeling are immediately available for each handler who will wear one. This must be documented in the FMP.

Cartridges or canisters must be replaced when odor or irritation from this product becomes apparent, if the measured concentration of chloropicrin is greater than or equal to 1.5 ppm, or after 8 hours of use, whichever occurs first.

Air-Rescue Device Availability

The employer of any handler must confirm that at least one air-rescue device (e.g., SCBA) is on-site and is ready for use in case of an emergency. This must be documented in the FMP.

Exclusion of Non-Handlers from Application Block:

The Certified Applicator supervising the application and the owner/operator of the establishment where the fumigation is taking place must make sure that all persons who are not trained and PPE-equipped and who are not performing one of the handling tasks as stated in this labeling are excluded from the application block during the entry restricted period and from the buffer zone during the buffer zone period.

Entry Restricted Period

Entry (including early entry that would otherwise be permitted under the WPS) by any person, other than a correctly trained and PPE-equipped handler who is performing a handling task listed on this labeling, is PROHIBITED from the start of the application until:

- 5 days (120 hours) after the application is complete for untarped applications, or
- 5 days (120 hours) after application is complete if tarps are not perforated and removed for at least 14 days following application, NOTE: Persons installing, repairing, or monitoring tarps are handlers until 14 days after the application is complete if tarps are not perforated and removed during those 14 days, or
- 48 hours after tarp perforation is complete if tarps will not be removed for at least 14 days following application, or
- Until tarp removal is completed if tarps are both perforated and removed less than 14 days after application.

NOTE: See **Tarp Perforation and/or Removal** section on this labeling for requirements about when tarps are allowed to be perforated.

Notification

Notify workers of the application by warning them orally and by posting Fumigant Treated Area signs. The Fumigant Treated Area signs must bear the skull and crossbones symbol and state:

- (1) "DANGER/PELIGRO"
- (2) "Areas under fumigation, DO NOT ENTER/NO ENTRE"
- (3) Iodomethane/Chloropicrin Fumigant In Use
- (4) Date and time of fumigation
- (5) Date and time entry restricted period is over
- (6) MIDAS 33:67, and
- (7) Name, address, and telephone number of the Certified Applicator in charge of the fumigation.

Post the Fumigant Treated Area sign instead of the WPS sign for this application but follow all WPS requirements pertaining to location, legibility, size and timing of posting and removal.

Post the Fumigant Treated Area signs at all entrances to the application block (i.e., the field or portion of a field treated with a fumigant in any 24-hour period.)

Tarp Perforation and/or Removal

IMPORTANT: Persons perforating, repairing, removing, and/or monitoring tarps are defined, within certain time limitations, as handlers (see handlers as stated in this labeling) and must be provided the PPE and other protections for handlers as required on this labeling and in the Worker Protection Standard for Agricultural Pesticides.

- Standard tarps must not be perforated until a minimum of 5 days (120 hours) have elapsed after the fumigant injection into the soil is complete (e.g., after tarps have been laid), unless a weather condition exists which necessitates early perforation or removal, see **Early Tarp Removal for Broadcast Applications Only** and **Early Tarp Perforation for Flood Prevention Activities** sections. Highly retentive tarps (on an Arysta approved list) must not be perforated until a minimum of 10 days (240 hours) have elapsed after the fumigation injection into the soil is complete.
- If tarps will be removed before planting, tarp removal must not begin until at least 2 hours after tarp perforation is complete.
- If tarps will not be removed before planting, planting or transplanting must not begin until at least 48 hours after the tarp perforation is complete.
- If tarps are left intact for a minimum of 14 days after fumigant injection into the soil is complete, planting or transplanting may take place while the tarps are being perforated.
- Each tarp panel used for broadcast fumigation must be perforated.
- Tarps used for fumigations may be perforated manually **ONLY** for the following situations:
 - At the beginning of each row when a coulter blade (or other device which performs similarly) is used on a motorized vehicle such as an ATV.
 - In fields that are 1 acre or less.
 - During flood prevention activities.
- In all other instances tarps must be perforated (cut, punched, poked, or sliced) only by mechanical methods.
- Tarp perforation for broadcast fumigations must be completed before noon.
- For broadcast fumigations, tarps must not be perforated if rainfall is expected within 12 hours.
- **Early Tarp Removal for Broadcast Applications Only:**
 - Tarps may be removed before the required 5 days (120 hours) or 10 days (240 hours) if adverse weather conditions have compromised the integrity of the tarp, provided that the compromised tarp poses a safety hazard. *Adverse weather* includes high wind, hail, or storms that blow tarps off the field and create a hazard, e.g., tarps blowing into power lines and onto roads. A *compromised tarp* is a tarp that due to an adverse weather condition is no longer performing its intended function and is creating a hazard.
 - If tarps are removed before the required 5 days (120 hours) or 10 days (240 hours) have elapsed due to adverse weather, the events must be documented in the post-application summary.
- **Early Tarp Perforation for Flood Prevention Activities**
 - Tarp perforation is allowed before the 5 days have elapsed.
 - Tarps must be immediately retucked and packed after soil removal.

Buffer Zone

The area adjacent to the treated area is referred to as the buffer zone. The buffer zone shall extend from the edge of the treated area in all directions. See Buffer Zone Table. The minimum buffer zone distance shall be 25 feet.

The Certified Applicator supervising the soil fumigation is responsible for the following:

1. Calculating the appropriate size of the buffer zone that must be maintained from the start of the application until 48 hours following the end of the application;
2. Establishing and maintaining the buffer zone from the start of the application until 48 hours following the end of the application. The Certified Applicator must use an appropriate means to manage and maintain the buffer zone such as posting Buffer Zone signs around the perimeter of the buffer zone at potential points of entry, using trained workers to patrol the buffer zone, or

other equivalent means. If Buffer Zone signs are used, they must be posted from the start of the application until 48 hours following the end of the application and must be removed within 3 days of the end of the buffer zone period. The Buffer Zone signs must include the same warning symbol and statements required for Fumigant Treated Area signs as stated on this label with the exception that signs will indicate "Fumigant Buffer Zone" at the top of the sign and will delete the statement "areas under fumigation".

3. Ensuring that unprotected workers and bystanders do not enter the buffer zone from the start of the application until 48 hours following the end of the application. Exception: Unprotected workers and bystanders may travel through (but not engage in any activity in) the buffer zone during the application and the 48-hour period following the end of the application, provided their total exposure time in any 24-hour period is 15 minutes or less. However, travel by unprotected workers or bystanders through the fumigated area itself is prohibited during the entire Entry Restricted period. Handlers protected with required Personal Protective Equipment (PPE) may work in buffer zones. See the PERSONAL PROTECTIVE EQUIPMENT section.
4. Ensuring application site has a distinctive buffer zone. The buffer zone of the field to be treated cannot overlap the buffer zone of another field treated within the last 48 hours.
5. Ensuring that there are no occupied nursing homes, hospitals, or prisons; and no occupied licensed schools, licensed day care facilities and licensed assisted living facilities (licensed by state or local governments) within $\frac{1}{4}$ mile of the fumigated area during the buffer zone period.

Determining Buffer Zone Distance

- Determine the size of the buffer zone using the following Buffer Zone Table.
- The size of the buffer zone will be dependent on the following three factors:
 - The number of field acres that are being treated with MIDAS 33:67.
 - The pounds of MIDAS 33:67 that are being applied per treated acre.
 - Buffer zone reduction credits.

Buffer Zone Table

MIDAS 33:67 Application Rate (Lbs per Treated Acre) ⁴	SIZE OF FIELD IN ACRES (Buffer zone distance in feet) ^{1,2}							
	Up to 5 Acres	6 – 10 Acres	11-15 Acres	16- 20 Acres	21-25 Acres	26-30 Acres	31-35 Acres	36-40 ³ Acres
100	25	25	45	60	70	80	90	95
150	25	30	60	85	100	115	130	145
175	25	35	70	100	120	135	150	165
200	25	40	80	115	135	155	175	190
250	25	50	95	140	165	190	215	235
300	30	60	115	170	200	230	260	285
350	35	70	135	200	235	265	300	330
360	35	70	140	205	240	275	310	340
400	40	75	150	225	265	305	345	380
500	50	95	190	285	335	380	430	475
520	50	100	200	300	350	400	450	500

1. For rates not listed on this table, use the buffer zone for the next highest rate, or use the following calculation to determine the exact buffer zone:

$$\text{Buffer Zone for Application Rate Not Listed} = \frac{\text{Known Buffer Zone on Table} \times \text{Application Rate Not Listed}}{\text{Rate of Application for Known Buffer Zone}}$$

2. Buffer Zone Reduction Credits:

Reduce buffer zone by 10% for each factor listed below:

- Use of flat fume/broadcast application
- Use of highly retentive films. Highly retentive films for which credit can be applied must be on an Arysta approved list. Examples of Arysta approved films are Canslit Brand Metalized 1.3 mil, Pliant Blockade® VIF 1.25 mil, or Pliant Metalized 1.0-1.25.
- Application to soils having >3% organic matter Refer to the USDA or USGS Soil Survey Maps for the treated area that identify the range of organic matter and / or a documented soil survey report that lists range of % organic matter for the treated area. Collection of samples for analysis of soil in the treated area should follow procedures as per USDA's Natural Resource Conservation Services methods. Information on soil sampling can be found at www.soil.usda.gov.

For example, if the Buffer Zone is 50 feet and the application qualifies for a buffer zone reduction credit such as use of highly retentive tarps, then the buffer zone can be reduced by 10%, i.e., reduced by 5 feet based on the following calculation: 50 ft – (50 ft X 10%) = 45 feet.

If the application qualifies for two buffer zone reduction credits such as use of highly retentive tarps and soil with >3% organic matter, then the buffer zone can be reduced by 20%, i.e., reduced by 10 feet based on the following calculation: 50 ft – (50 ft X 20%) = 40 feet.

3. Applications are limited to 40 contiguous acres or less per day
4. For raised bed applications, the treated area is the raised bed not the untreated furrows. As an example, if a raised bed field is 50% raised bed (treated) and 50% furrow (untreated), and 350 lbs of MIDAS 33:67 is applied to the raised beds of the field, then the effective application rate to the treated raised bed is 350 lbs per treated acre; and that is the rate that would determine the buffer zone.

Note: Minimum allowable buffer zone is 25 feet regardless of buffer zone reduction credits.

Buffer Zone for Tree Replant – Probe or Auger Applications

- 25 feet if the application rate is less than 150 lbs MIDAS 33:67 per acre.
- 50 feet if application rate is 150 to 379 lbs MIDAS 33:67 per acre, and
- 100 feet if the application rate is 380 to 520 lbs MIDAS 33:67 per acre.

GENERAL INFORMATION AND INSTRUCTIONS

This fumigant is a highly hazardous material. All uses of this fumigant are covered under the Worker Protection Standard, and must be conducted in accordance with all of the requirements of the Worker Protection Standard (40 CFR Part 170). It is a restricted use pesticide that must only be used by Certified Applicators, certified by the state and trained by Arysta in the proper handling, worker protection, and application of MIDAS 33:67 soil fumigant and handlers under their direct supervision. Before using, read the entire label and follow all use directions and precautions. All persons working with this fumigant must be knowledgeable about the hazards and trained in the use of required air-purifying respirator equipment and detector devices, emergency procedures and proper use of the fumigant.

Control of Soil-Borne Pests: MIDAS 33:67 controls soil-borne pests including nematodes, insects, weed seeds, and diseases.

MIDAS 33:67 will control the following pests when present in soil at the time of treatment:

Weed Seeds, including broadleaf weeds such as nutsedge, pigweed, broomrape and lambsquarters, and grasses such as bermudagrass, and annual bluegrass. Effectiveness against hard seed weeds, such as mallow, dodder, morning glory, and certain leguminous weeds may be variable.

Plant-parasitic Nematodes, such as root-knot, root lesion (meadow), cyst, citrus, burrowing, false root-knot, lance, spiral, ring, stubby root, dagger, awl, sheath and sting (stylet) nematodes.

Soil-borne Insects, such as wireworms, cutworms, grubs, rootworms, ants and garden symphylans.

Soil-borne Diseases, such as *Verticillium*, *Pythium*, *Rhizoctonia*, *Phytophthora*, and *Fusarium*.

MIDAS 33:67 is not to be used as a preventative treatment for pests that may be introduced after the fumigant has been applied and/or tarps removed. To reduce the potential for the re-introduction of pests (nematodes, weed seed and disease); avoid the use of irrigation water, transplants or equipment that could carry pests into the planting area. Avoid moving infested soil back into the treated area through cultivation or other means.

GENERAL USE PRECAUTIONS

- Follow all local government instructions for posting of treated areas and post all treated areas with warning signs.
- Comply with all local ordinances and regulations.
- Do not apply within ¼ mile of nursing homes, hospitals or prisons; or licensed schools, licensed day care facilities or licensed assisted living facilities (licensed by state or local governments) that will be occupied during the buffer zone period.
- Applications are limited to 40 contiguous acres or less per day.
- Never fumigate alone. A minimum of two persons must be present during handling and application of soil fumigants.
- Additional instructions must be made available to handlers in the mechanical operation of the tractor and how to safely work with the operator while fumigating.
- Always handle this product in the open, with all handlers positioned "upwind" from the container and/or where there is adequate ventilation.
- When fumigating from a tractor, it is required that 5 gallons of water be carried on the tractor and readily available for rinsing and cleaning purposes. An additional 5 gallons of water must be available in the service truck. This water must be potable and in containers marked "Decontamination water not to be used for drinking."

- For broadcast/flat fumigation applications, keep all pets, livestock and other domestic animals out of the treated areas until tarps have been removed.
- For raised bed applications, keep all pets, livestock and other domestic animals out of the treated areas for 5 days. Most raised bed applications will not result in tarp removal.
- Do not allow entry by unprotected persons into the fumigated area until the Fumigant Treated Area signs are removed.

SPILL AND LEAK PROCEDURES

- For Spill and Leak PPE requirements refer to the Personal Protective Equipment, All Handlers (including applicators) while performing tasks with liquid contact potential section on this label.
- Cease all operations if any leak develops in the fumigation system.
- Evacuate everyone from the immediate area of the spill or leak.
- Approach the area from the upwind side. Work upwind to repair leak(s), if possible.
- Only correctly trained and PPE-equipped handlers are permitted to enter. Do not permit entry into the spill or leak area by any other person until the concentration of chloropicrin is measured to be less than 0.15 ppm.
- Allow spilled fumigant to evaporate or to absorb onto vermiculite, dry sand, earth, or similar absorbent material. Such material should be disposed of on site or at an approved disposal facility.
- Contaminated soil, water and other cleanup debris may be hazardous waste. Report any spill that exceeds 302 lbs (20 gallons of product) to the National Response Center at 1-800-424-8802.

SITE-SPECIFIC FUMIGATION MANAGEMENT PLAN (FMP)

Prior to the start of fumigation, the Certified Applicator supervising the application must verify that a site-specific FMP exists for each application block (i.e., a field or portion of a field treated with a fumigant in any 24-hour period). In addition, an agricultural operation fumigating multiple application blocks may format the FMP in a manner whereby all of the information that is common to all the application blocks is captured once, and any information unique to a particular application block or blocks is captured in subsequent sections.

The FMP must be prepared by the Certified Applicator, the site owner/operator, registrant or other party.

The Certified Applicator must verify in writing (sign and date) that the site-specific FMP(s) reflects current site conditions before the start of fumigation.

Each site-specific FMP must contain the following elements:

- Applicator information (name, phone number, pesticide applicator license and/or certificate number, employer name, employer address)
- General site information
 - Application block location (e.g., county, township-range-section quadrant), address, or global positioning system (GPS) coordinates
 - Name, address, and phone number of owner/operator of the application block
 - Diagrams and maps
 - Identify nursing homes, hospitals, prisons, licensed schools, licensed day care facilities, or licensed assisted living facilities (licensed by state or local governments) within ¼ mile of the fumigated area, and document how it was determined that such sites would be unoccupied during the application period.
- General application information (target application date/window, brand name of fumigant, EPA registration number)
- Tarp information and procedures for repair, perforation, and removal (if tarp is used)
 - Brand name, lot number, thickness
 - Name and phone number of person responsible for repairing tarps

- Schedule for checking tarps for damage, tears, and other problems
- Maximum time following notification of damage that the person(s) responsible for tarp repair will respond
- Minimum time following application that tarp will be repaired
- Minimum size of damage that will be repaired
- Other factors used to determine when tarp repair will be conducted
- Name and phone number of person responsible for perforating and/or removing tarps (if other than Certified Applicator)
- Equipment/methods used to perforate tarps
- Schedule and target dates for perforating tarps
- Schedule and target dates for removing tarps
- Soil conditions (description of soil texture in application block, method used to determine soil moisture)
- Weather conditions (summary of forecasted conditions for the day of the application and the 48-hour period following the fumigant application)
 - Wind speed
 - Inversion conditions (e.g., shallow, compressed (low-level) temperature inversion)
 - Air stagnation advisory
- Buffer Zones
 - Application method
 - Application rate (pounds of Midas 33:67)
 - Application block size (acres)
 - Credits applied
 - Description of areas in the buffer zone that are not under the control of the owner/operator of the application block and how it was verified that these structures were unoccupied during the buffer zone period.
- Air-purifying respirators, air-rescue devices, and other personal protective equipment (PPE) for handlers (handler task, protective clothing, air-purifying respirator type, respirator cartridge type, respirator cartridge replacement schedule, air-rescue device type, eye protection, gloves, other PPE)
- Air-Fan Dilution System: Verification that the fan/blower intake is at least 126 inches from the ground, and the fan/blower is capable of operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.
- Emergency procedures (evacuation routes, locations of telephones, contact information for first responders, local/state/federal/tribal contacts, key personnel and emergency procedures/responsibilities in case of an incident, equipment/tarp/seal failure or complaints, or other emergencies).
- Fumigant Treated Area and/or Buffer Zone (if used) posting procedures [person(s) who will post Fumigant Treated Area and/or Buffer Zone (if used) signs, location of Fumigant Treated Area and/or Buffer Zone (if used) signs, procedures for Fumigant Treated Area and/or Buffer Zone (if used) sign removal].
- Plan describing how communication will take place between the applicator, land owner/operator, and other on-site handlers (e.g., tarp perforators/removers, irrigators) for complying with label requirements (e.g., timing of tarp perforation and removal, PPE, buffer zone location).
 - Name and phone number of persons contacted
 - Date contacted
- Authorized on-site personnel
 - Names, addresses and phone numbers of handlers
 - Names, addresses and phone numbers for employers of handlers
 - Tasks that each handler is authorized and trained to perform
 - For handlers designated to wear air-purifying respirators:
 - date of medical qualification to wear an air-purifying respirator
 - date of air-purifying respirator training, and
 - date of fit-testing for the air-purifying respirator.

- Air monitoring plan
 - If sensory irritation is experienced, indicate whether operations will be ceased or operations will continue with an air-purifying respirator
 - If the intention is to cease operations when sensory irritation is experienced, provide the name, address, and phone number of the handler that will perform monitoring activities prior to operations resuming.
 - When air-purifying respirators are worn:
 - Representative handler tasks to be monitored
 - Monitoring equipment to be used and timing of monitoring
- Good Agricultural Practices (GAPs)
 - Description of applicable mandatory GAPs
 - Measurements and documentation to ensure GAPs are achieved (e.g., measurement of soil and other site conditions)
- Description of hazard communication. (The application block has been posted in accordance with the label. Non-handlers are excluded from the buffer zone. Pesticide product labels and material safety data sheets are on-site and readily available for employees to review.)
- Record-keeping procedures (the owner/operator of the application block as well as the Certified Applicator must keep a signed copy of the site-specific FMP for 2 years from the date of application).

For situations where an initial FMP is developed and certain elements do not change for multiple fumigation sites (e.g., applicator information, authorized on-site personnel, record-keeping procedures, emergency procedures) only elements that have changed need to be updated in the site-specific FMP provided the following:

- The Certified Applicator supervising the application has verified that those elements are current and applicable to the application block before it is fumigated.
- Record-keeping requirements are followed for the entire FMP (including elements that do not change).

Once the application begins, the Certified Applicator must make a copy of the FMP available for viewing by handlers involved in the fumigation. The Certified Applicator or the owner operator of the application block must provide a copy of the FMP to any local/state/federal/tribal enforcement personnel who request the FMP. In the case of an emergency, the FMP must be made immediately available when requested by local/state/federal/tribal emergency response and enforcement personnel.

Within 30 days of completing the application portion of the fumigation process, the Certified Applicator supervising the application must complete a post-application summary that describes any deviations from the FMP that have occurred, measurements taken to comply with GAPs, monitoring results as well as any complaints and/or incidents that have been reported to him/her.

The Post-Application Summary must contain the following elements:

- Actual date of the application, application rate, and size of application block fumigated
- Summary of weather conditions on the day of the application and during the 48-hour period following the fumigant application
- Soil temperature measurement (if air temperatures were above 100° F in any of the 3 days prior to the application)
- Tarp damage and repair information (if applicable)
 - Location and size of tarp damage
 - Description of tarp/tarp seal/tarp equipment failure
 - Date and time of tarp repair
- Tarp perforation/removal details (if applicable)
 - Description of tarp removal (if different than in the FMP)
 - Date tarps were perforated
 - Date tarps were removed
- Complaint details (if applicable)
 - Person filing complaint (e.g., on-site handler, person off-site)

- If off-site person, name, address, and phone number of person filing complaint
- Description of control measures or emergency procedures followed after complaint.
- Description of incidents, equipment failure or other emergency, and emergency procedures followed (if applicable)
- Details of elevated air concentrations monitored on-site (if applicable)
 - Location of elevated air concentration levels
 - Description of control measures or emergency procedures followed
 - Air monitoring results
 - When sensory irritation experienced:
 - Date and time of sensory irritation
 - Handler task/activity
 - Handler location where irritation was observed
 - Resulting action (e.g., cease operations, continue operations with air-purifying respirators)
 - When using a direct read instrument:
 - Sample date and time
 - Handler task/activity
 - Handler location
 - Air concentration
 - Sampling method
- Date of Fumigant Treated Area sign removal
- Date of Buffer Zone sign removal (if used)
- Any deviations from the FMP
- Record-keeping procedures (the owner/operator of the application block as well as the Certified Applicator must keep a signed copy of the post-application summary for 2 years from the date of application).

MANDATORY GOOD AGRICULTURAL PRACTICES (GAPs)

The following GAPs must be followed during all fumigant applications. All measurements and other documentation planned to ensure that the mandatory GAPs are achieved must be recorded in the FMP and/or post-application summary.

- MIDAS 33:67 must be transferred through connecting hoses, pipes, and/or couplings sufficiently tight to prevent workers or other persons from coming in contact with the liquid.
- All hoses, piping, and tanks used in connection with this product shall be of a type appropriate for use under the pressure and vacuum conditions to be encountered.
- Hoses between any fumigant container and the flow divider must be Teflon® hoses reinforced with stainless steel wire braid or its equivalent.
- External sight gauges, if applicable, shall be equipped with a valve so that pipes to sight gauge can be shut off in case of breakage or leakage.
- The mechanical transfer system must be adequate to make necessary measurements of the pesticide being used.
- Shut-off devices must be installed on the exit end of all cylinder connections and at all disconnect points to prevent leakage of product when the transfer is stopped and hose is removed or disconnected.
- The pressure in hoses used to move the product must not exceed the manufacturer's maximum pressure specifications.
- Check equipment to ensure good condition and integrity prior to each use.

Tarps (tarps are required for all Midas 33:67 applications except for Tree Replant - Probe or Auger Applications). Tarps must be installed immediately after the fumigant is applied to the soil.

- A written tarp plan must be developed and included in the FMP. The plan must include:
 - schedule and procedures for checking tarps for damage, tears, and other problems
 - plans for determining when and how repairs to tarps will be made, and by whom

- o minimum time following injection that tarp will be repaired
- o minimum size of tarp damage that will be repaired
- o other factors used to determine how and when tarp repair will be conducted
- o schedule, equipment, and methods used to perforate tarps
- o aeration plans and procedures following perforation of tarp, but prior to tarp removal or planting/transplanting
- o schedule, equipment, and procedures for tarp removal

Weather Conditions

- Prior to fumigation the weather forecast for the day of the application and the 48-hour period following the fumigation must be checked to determine if unfavorable weather conditions exist (see **Identifying Unfavorable Weather Conditions** section) or are predicted and whether fumigation should begin.
- Wind speed at the application site must be a minimum of 2 mph at the start of the application or forecasted to reach at least 5 mph during the application.
- Do not apply if a shallow, compressed (low-level) temperature inversion is forecast to persist for more than 18 consecutive hours for the 48-hour period after the start of application, or if there is an air stagnation advisory issued by the National Weather Service in effect for the area in which the fumigation is planned.
- Detailed local forecasts for weather conditions, wind speed, and air stagnation advisories may be obtained on-line at: <http://www.nws.noaa.gov>, or by contacting your local National Weather Service Forecasting Office.
- **Identifying Unfavorable Weather Conditions** - Unfavorable weather conditions block upward movement of air, which results in trapping fumigant vapors near the ground. The resulting air mass can move off-site in unpredictable directions. These conditions typically exist prior to sunset and continue past sunrise and persist as late as noontime. Unfavorable conditions are common on nights with limited cloud cover and light to no wind and their presence can be indicated by ground fog or smog and can also be identified by smoke from a ground source that flattens out below a ceiling layer and moves laterally in a concentrated cloud.

Soil Preparation

- Soil must be properly prepared and at the surface generally be free of large clods. The area to be fumigated must be tilled to a depth of at least 5 to 8 inches.
- Field trash must be properly managed. Residue from a previous crop must be worked into the soil to allow for decomposition prior to fumigation. Little or no crop residue shall be present on the soil surface. Crop residue that is present must not interfere with the soil seal. Removing the crop residue prior to fumigation is important to limit the natural "chimneys" that occur in the soil when crop residue is present. These "chimneys" allow the soil fumigants to move through the soil quickly and escape into the atmosphere. This may create potentially harmful conditions for workers and bystanders and limit the efficacy of the fumigant. However, crop residue on the field serves to prevent soil erosion from both wind and water and is an important consideration. To accommodate erosion control, fumigant efficacy, and human health protection, clear fields of crop residue as close to the timing of the fumigation as possible to limit the length of time that the soil would be exposed to potentially erosive weather conditions.

Prior to All Applications:

- Ensure that application equipment does not contain components made of natural rubber, aluminum, magnesium or their alloys.

During All Applications:

- Do not change cylinders when the fumigant system is under pressure. Change cylinders with all cylinder valves in the off position.

Following All Applications:

- To minimize the potential for crop injury, allow the fumigant to dissipate before planting a crop. Seeds may be used as a bioassay to determine if MIDAS 33:67 is present in the soil at

concentrations sufficient to cause plant injury. See fumigation tables for planting requirements specific to the different application methods.

- Fumigation of highly acidic soils or those high in organic matter can cause ammonia toxicity to plants and or elevated levels of soluble salts in the soil causing phytotoxicity. Analyze soil following fumigation and fertilize as indicated. Avoid those fertilizers using ammonium salts.
- When using standard tarps, planting shall not occur for at least 10 days after application.
- When using highly retentive tarps, planting shall not occur for at least 14 days after application.

MANDATORY GOOD AGRICULTURAL PRACTICES (GAPs) FOR MIDAS 33:67 BEDDED AND BROADCAST SHANK APPLICATIONS

In addition to the GAPs required for all Midas 33:67 soil fumigation applications, the following GAPs apply for bedded and broadcast shank injection applications:

Soil Preparation

- Allow time for complete voiding of material in the buried shanks following the closure of the shutoff valve and before removing the shanks from the soil.
- In the event that trash is pulled up with the shanks after completing a treatment pass, the trash must be covered with the tarp and the edges of the tarp must be buried under at least 4 inches of compacted soil before making the next pass through the field.

Soil Temperature

- The soil temperature at the depth of injection must not be less than 55° F or exceed 90° F at the beginning of the application.
- If air temperatures have been above 100° F in any of the three days prior to application, then soil temperature must be measured and recorded in the FMP.

Soil Moisture

- The soil must be moist 9 inches below the surface. The amount of moisture needed will vary according to the soil type. Surface soil generally dries rapidly and must not be considered in this determination.
- Soil moisture must be determined by one of the following methods:
 - The USDA Feel and Appearance Method for testing, or
 - An instrument, such as a tensiometer.
- If there is insufficient moisture 9 inches below the surface, the soil moisture must be adjusted. If irrigation is not available and there is adequate soil moisture below 9 inches, soil moisture can be adjusted by disking or plowing before fumigant injection. To conserve existing soil moisture, pretreatment irrigation or pretreatment tillage should be done as close to the time of application as possible.
- Measure soil moisture at a depth of 9 inches at either end of the field, no more than 48 hours prior to application.

Soil moisture determination using the USDA Feel and Appearance Method

- For **coarse** textured soils (fine sand and loamy fine sand) there must be enough moisture (50 to 75 percent available soil water moisture/50 to 75 percent field capacity) so the soil is moist, forms a weak ball with loose and clustered sand grains on fingers, darkened color, moderate water staining on fingers; will not ribbon.
- For **moderately coarse** textured soils (sandy loam and fine sandy loam) there must be enough moisture (50 to 75 percent available soil water moisture/50 to 75 percent of field capacity) so the soil is moist, forms a ball with defined finger marks, very light soil/water staining on fingers, darkened color will not stick.
- For **medium** textured soils (sandy clay loam, loam, and silt loam) there must be enough moisture (50 to 75 percent available soil water moisture/50 to 75 percent of field capacity) so the soil is moist, forms a ball, very light staining on fingers, darkened color, pliable, and forms a weak ribbon between the thumb and forefinger.

- For **fine** textured soils (clay, clay loam, and silty clay loam) there must be enough moisture (50 to 75 percent available soil water moisture/50 to 75 percent of field capacity) so the soil is moist, forms a smooth ball with defined finger marks, light soil/water staining on fingers, ribbons between thumb and forefinger.
- For **fields with more than one soil texture**, soil moisture content in the lightest textured (most sandy) areas must comply with this soil moisture requirement. Whenever possible, the field should be divided into areas of similar soil texture and the soil moisture of each area should be adjusted as needed. Coarser textured soils can be fumigated under conditions of higher soil moisture than finer textured soils; however, if the soil moisture is too high, fumigant movement will be retarded and effectiveness of the treatment will be reduced. Previous and/or local experience with the soil to be treated or the crop to be planted can often serve as a guide to conditions that will be acceptable. If there is uncertainty in determining the soil moisture content of the area to be treated, a local extension service agent, soil conservation service specialist, or pest control advisor (agriculture consultant) should be consulted for assistance.

Application Depth

- **For Tarped-Broadcast and Tarped-Bedded Applications:** The injection point must be a minimum of 6 inches from the nearest final soil/air interface. The application depth in preformed beds must not be below the bed furrow.

Prevention of End Row Spillage

- Do not apply or allow fumigant to spill onto the soil surface. For each injection line either have a check valve located as close as possible to the final injection point, or drain/purge the line of any remaining fumigant prior to lifting injection shanks from the ground.
- Do not lift injection shanks from the soil until the shut-off valve has been closed and the fumigant has been depressurized (passively drained) or purged (actively forced out via air compressor) from the system.

Calibration, Set-up, Repair and Maintenance for Application Rigs

- Brass, carbon steel or stainless steel fittings must be used throughout. Polyethylene tubing, polypropylene tubing, Teflon® tubing or Teflon®-lined steel braided tubing must be used for all low pressure lines, drain lines, and compressed gas or air pressure lines. All other tubing must be Teflon®-lined steel braided.
- Galvanized, PVC, nylon or aluminum pipe fittings must not be used.
- All rigs must include a filter to remove any particulates from the fumigant, and for pressurized systems a check valve to prevent backflow of the fumigant into the pressurizing cylinder or the compressed air system
- Rigs must include a flowmeter or a constant pressure system with orifice plates to insure the proper amount of fumigant is applied.
- To prevent the backflow of fumigant into the compressed gas cylinder (e.g., nitrogen, other inert gas, compressed air), if used, applicators must:
 - When applying MIDAS 33:67 from steel cylinders using compressed gas, ensure that positive pressure is maintained in the cylinder at not less than 80 psi during the entire time it is connected to the application rig, (*This is not required for a compressed air system that is part of the application rig because if the compressor system fails the application rig will not be operable*).
 - When applying MIDAS 33:67 from drum-in-drum poly-totes, using compressed gas, maintain a positive pressure of not less than 35 psi during the entire time it is connected to the application rig. (*This is not required for a compressed air system that is part of the application rig because if the compressor system fails the application rig will not be operable*).
 - Ensure that application rigs are equipped with properly functioning check valves between the compressed gas cylinder or compressed air system and the fumigant cylinder. The check valve is best placed on the outlet side of the pressure regulator, and is oriented to only allow compressed gas to flow out of the cylinder or compressed air out of the compressed air system.

- Always pressurize the system with compressed gas or by use of a compressed air system before opening the fumigant cylinder valve.
- Before using a fumigation rig for the first time, or when preparing it for use after storage, the operator must check the following items carefully:
 - Check the filter, and clean or replace the filter element as required.
 - Check all tubes and chisels to make sure they are free of debris and obstructions.
 - Check and clean the orifice plates and screen checks, if installed.
 - Pressurize the system with compressed gas or compressed air, and check all fittings, valves, and connections for leaks using soap solution.
- Install the fumigant cylinder, and connect and secure all tubing. Slowly open the compressed gas or compressed air valve, and increase the pressure to the desired level. Slowly open the fumigant cylinder valve, always watching for leaks.
- When the application is complete, close the fumigant cylinder valve and blow residual fumigant out of the fumigant lines into the soil using compressed gas or compressed air. At the end of the application, disconnect all fumigant cylinders from the application rig. At the end of the season, seal all tubing openings with tape to prevent the entry of insects and dirt.

Application equipment must be calibrated and all control systems must be working properly. Proper calibration is essential for application equipment to deliver the correct amount of fumigant uniformly to the soil. Refer to the manufacturer's instructions on how to calibrate your equipment, usually the equipment manufacturer, fumigant dealer, or Cooperative Extension Service can provide assistance.

Soil Sealing

Raised Bed Applications

- Use tractor mounted chisels spaced no more than 12 inches apart. Injection spacing of 12 inches or less is typically performed with a multiple shank applicator. The treated ground must be sealed using either:
 - Soil sealing at the time of application: The treated ground must be sealed using closing shoes, roller, compaction roller, cultipacker, or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarp (with fumigant injection) by tarp-laying equipment mounted on the application tractor; or
 - Bed shaper: The chisels shall be placed with the injection point under the bed shaper, and the tarp shall be laid down simultaneously (with fumigant injection) by tarp-laying equipment mounted on the application tractor; or
 - Combination bed former and bed shaper: The chisels shall be placed between the bed former and the bed shaper. The tractor with the tarp-laying equipment shall immediately follow the application tractor.

Broadcast/Flat Fume Applications

- Use tractor mounted chisels spaced no more than 12 inches apart.
 - Soil sealing at time of application: The treated ground must be sealed using closing shoes, roller, compaction roller, cultipacker or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarp (with fumigant injection) by tarp-laying equipment mounted on the application tractor.

TREE REPLANT – PROBE OR AUGER APPLICATION: MANDATORY GAPS

This application method is used when MIDAS 33:67 is applied to individual tree sites in an existing orchard where shank applications are not possible.

In addition to the GAPS required for all MIDAS 33:67 soil fumigation applications, the following GAPS apply for MIDAS 33:67 tree replant – probe or auger applications:

Site Preparation

- Remove the tree stump and primary root system in each individual tree-site with a back-hoe or other similar equipment, for example an auger.
- The hole must be backfilled with soil before application.

Application Depth

- The fumigant must be injected at least 18 inches into the soil, typically between 18 and 36 inches.

System Flush

- Before removing the application wand from the soil the wand must be cleared using nitrogen or compressed air.

Soil Sealing

- After the wand is cleared and removed from the soil, the injection hole must be either covered with soil and tamped; or the soil must be compacted over the injection hole.

MIDAS 33:67 PRE-PLANT FIELD FUMIGATION METHODS

Fumigation with MIDAS 33:67 shall only be performed in accordance with the following three application techniques: 1) Raised Bed Application, 2) Broadcast/Flat Fume Application, or 3) Tree Replant – Probe or Auger Application (stone fruit, nut trees, vines, and field-grown ornamentals only). Application methods and rates of application for each of these methods are discussed in detail below.

Application Rates for Raised Bed Fumigation: Rates in the table below are given in pounds of MIDAS 33:67 per broadcast acre. The amount of product applied will be proportionate to the row spacing and width of the raised bed. To calculate the amount of product to be applied, multiply the application rate in lbs MIDAS 33:67/broadcast acre by the appropriate modifier from the Field Rate Modifier Table provided below.

RAISED BED SOIL FUMIGATION TABLE		
Crop	MIDAS 33:67 Per Broadcast Acre ¹	Time Between Application and Planting ²
Field-Grown Ornamentals Peppers Strawberries Tomatoes	Standard Tarps 300 - 520 lbs/Broadcast Acre (19.9 – 34.4 gal/Broadcast Acre)	10 – 14 days
	Highly Retentive Tarps³ 175-250 lbs/Broadcast Acre 11.6 – 16.6 gal/Broadcast Acre	14 – 21 days when using highly retentive tarps
NOTE: ¹ For fields infested with nutsedge and Malva, apply a minimum of 450 lbs/broadcast acre (29.8 gal/acre) of MIDAS 33:67 with standard film and 250 lbs/broadcast acre (16.6 gal/acre) with highly retentive tarps. ² Use the longer planting restriction period under conditions of high soil moisture, heavy soils, or rain. ³ Contact your Arysta LifeScience representative for tarp selection and rate reduction recommendations and approved tarps.		

Field Rate Modifier Table for Raised Bed Applications

Row Spacing (inches)	Bed Width (inches)	Field Rate Modifier
72	40	0.55
72	36	0.50
72	32	0.44
72	30	0.42
72	28	0.39
66	32	0.48
66	30	0.45
66	28	0.42
66	24	0.36
60	30	0.50
60	28	0.47
48	28	0.58

APPLICATION RATES FOR BROADCAST / FLAT FUME FUMIGATION WITH STANDARD TARPS

Crop	MIDAS 33:67 Per Acre ¹	Time Between Application and Planting
Field-Grown Ornamentals Peppers Strawberries Tomatoes Turf	300 – 520 lbs/Acre (19.9 – 34.4 gal/Acre)	10 – 14 days
Stone Fruits (Apricot, Sweet Cherry, Tart Cherry, Nectarine, Peach, Plum, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot, Fresh Prune) Tree Nuts (Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (Hazelnut), Hickory Nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Black Walnut, English Walnut) Vines (Table, Raisin and Wine Grape)	360- 520 lbs/Acre (23.8 – 34.4 gal/Acre)	10 – 14 days
Nurseries (including strawberries, stone fruits, tree nuts and conifer trees)	520 lbs/Acre (34.4 gal/Acre)	10 – 14 days

NOTE:

¹ For fields infested with nutsedge and Malva apply a minimum of 300 lbs/acre (19.9 gal/acre) of MIDAS 33:67.

Application Rates for Broadcast/Flat Fume Fumigation with Highly Retentive Tarps

Contact your Arysta LifeScience North America representative for information on tarp selection and rate reduction recommendations for highly retentive tarps. Applications using highly retentive tarps shall not exceed 300 lbs/Acre (19.9 gal/Acre).

Tree Replant – Probe or Auger Application: For Stone Fruit Trees, Tree Nuts, Vines, and Field Grown Ornamental Trees and Shrubs, use 2 lbs of MIDAS 33:67 per injection site. Use 1 injection site per 100 square feet (i.e., one injection site every 10 feet in a standard grid pattern). Planting or replanting of

Stone Fruit Trees, Tree Nuts, Vines, and Field-Grown Ornamental Trees and Shrubs may begin 14 days after treatment. DO NOT PLANT if the odor of chloropicrin is detectable.

Do not treat more than 230 trees/shrubs/vines per acre per day.

ROTATIONAL CROPS

Food crops other than strawberry, tomatoes, and peppers require a 4 month plant back rotation restriction from the date of fumigant application. Crop rotation to non-food crops or non-bearing fruit or nut trees is not restricted.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store in a dry, cool, well-ventilated area under lock and key. When appropriate to prevent tipping, store cylinders upright, secured to a rack or wall. Post as a pesticide storage area.

Handling: Product cylinders shall not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging or sliding. Do not use rope slings, hooks, tongs, or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured.

Do not remove valve protection bonnet and safety cap until immediately before use. When cylinder is not in use, close valve by turning clockwise until hand tight, screw safety cap onto valve outlet, and replace protection bonnet.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Return of Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

This pesticide container, whether full or partially used, is the property of the manufacturer or distributor where it was purchased and must be returned to the distributor of origin. Do not ship containers without safety caps or valve protection bonnets. Containers shall never be refilled by the consumer or used for any other product or purpose.

FOR 24-HOUR CHEMICAL EMERGENCY (spill, leak, fire or accident) ASSISTANCE:
Call CHEMTREC at 1-800-424-9300

Warranty and Disclaimer Statement

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America, LLC ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF ARYSTA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF ARYSTA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT ARYSTA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.

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Arysta LifeScience and the Arysta LifeScience logo are registered trademarks of Arysta LifeScience, LLC



Midas Label Revisions

Andrea Carone to: Alex.hawkins

02/25/2010 05:17 PM

Alex,

As we discussed earlier this week, I have attached the following:

- A revised version of the Midas 50:50 product for sale and use in states other than Florida with the changes tracked
- A clean revised version of the Midas 50:50 product for sale and use in states other than Florida
- A clean revised version of the Midas EC GOLD product for sale and use in states other than Florida

These labels should be used as templates for the other Midas labels.

Some things to note:

- There is a phrase highlighted in yellow that says, "insert EPA website," EPA is currently working on the web address for the labels and so this edit will be part of the stamped approved label. When you resubmit the labels please leave the "insert EPA website" on the label.
- I did not include a template for the Florida products, however you should be able to use the templates I sent to you for the Florida products.
- As we discussed the maximum application rate for drip applications of chloropicrin is 300 lbs ai/A. The maximum application rate for the Midas EC Gold product is 530 lbs, which is more than 300 lbs ai/A of chloropicrin. I think the maximum rate turns out to be around 490 lbs of product. The appropriate rate needs to be determined and put on the label.

Please let me know if you have any questions regarding the changes that were made.

Thanks,
Andrea



Midas 50-50 review with comments 22 Feb 2010.doc



draft clean Midas 50-50 label 12 Jan 2010.doc



draft clean Midas EC Gold label 22 Feb 2010.doc

**RESTRICTED USE PESTICIDE
DUE TO ACUTE TOXICITY**

For retail sale to and use by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

**MIDAS® 50:50
FOR SALE AND USE IN STATES OTHER THAN FLORIDA**

Only For Pre-Plant Fumigations of Fields Intended for Commercial Production of Listed Crops and Field-Grown Ornamentals, for the Control of Soil-Borne Pests Including Weed Seeds, Nematodes, Insects, and Diseases

ACTIVE INGREDIENTS:

Iodomethane.....	49.90%
Chloropicrin	49.75%
OTHER INGREDIENTS:	0.35%
TOTAL:	100.00%

One gallon weighs 15.9 pounds (7.93 pounds Iodomethane and 7.91 pounds Chloropicrin).

**KEEP OUT OF REACH OF CHILDREN
DANGER / PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail).

FIRST AID

If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person.

HOT LINE NUMBERS

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL:
1-866-303-6952 or 1-651-632-8946

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage. Symptoms of overexposure may include irritation to eyes, skin, and respiratory system, shortness of breath, nausea, vomiting, dizziness, ataxia, slurred speech, drowsiness, blurred vision, staggering gait and mental imbalance, with probable recovery after period of no exposure. Treatment is symptomatic.

EPA Reg. No. 66330-57
EPA Est. No.

For Product Information Call: 1-866-761-9397

Net Contents: _____ LBS.

Manufactured for
Arysta LifeScience North America, LLC
15401 Weston Parkway, Suite 150
Cary, NC 27513

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

Danger. Corrosive. Causes irreversible eye damage. Corrosive to skin. Causes skin burns. May be fatal if inhaled or swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin or on clothing. Do not breathe vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SPECIAL NOTE: This product contains chloropicrin, a poisonous liquid or vapor. Inhalation of vapors may be fatal. Chloropicrin is readily identified by smell. Exposure to very low concentrations of vapor will cause irritation of eyes, nose and throat. Continued exposure after irritation is evident or higher concentrations may cause painful irritation to the eyes or temporary blindness. Liquid will cause chemical burns to skin or eyes. Do not get on skin, in eyes, or on clothing. Chloropicrin fumigant has the capacity to cause marked irritation to the upper respiratory tract and is a strong lachrymator (tear producing eye irritant). Low concentrations, below those necessary to cause serious systemic intoxication, are capable of causing severely painful eye irritation, hence will not be voluntarily tolerated. However, the effect may be so powerful that a person may become temporarily blinded and panic-stricken and that in turn may lead to accidents.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminate or viton \geq 14 mils. For more options, follow the instructions for category H on the chemical-resistance category selection chart.

All Handlers (including applicators) performing tasks with liquid contact potential must wear:

- Loose fitting or well ventilated long-sleeved shirt and long pants,
- Chemical-resistant gloves,
- Chemical-resistant apron,
- Chemical-resistant footwear and socks,
- Full face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles, and
- A half face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approved number prefix TC-23C).
- In addition, if sensory irritation (tearing, burning, of the eyes or nose) is experienced while wearing a half-face air-purifying respirator, handlers must wear at a minimum a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C). See Directions for Use, Protection for Handlers, Respiratory Protection and Stop Work Triggers, number 1: *Handlers Wearing Half-Face Air-Purifying Respirators*, for when a full-face respirator is required.

All Handlers (including applicators) present in either the application block (i.e., a field or portion of a field treated with a fumigant in any 24-hour period) until 5 days (120 hours) after the application is complete (i.e., after tarps have been laid) or the buffer zone during the buffer zone period (see exception for transient travel in the Buffer Zone section) must wear:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles.
- A half face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C).
- In addition, if sensory irritation (tearing, burning, of the eyes or nose) is experienced while wearing a half-face air-purifying respirator, handlers must wear at a minimum a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C). See Directions for Use, Protection for Handlers, Respiratory Protection and Stop Work Triggers, number 1: *Handlers Wearing Half-Face Air-Purifying Respirators*, for when a full-face respirator is required.
- For tractor drivers and tractor co-pilots the following can be used in lieu of an air-purifying respirator:
 - A tractor equipped with a working-area air-fan dilution system consisting of a ducted fan/blower which provides air flow to the breathing zone of the tractor driver and co-pilot. The fan/blower must be mounted so that the fan/blower intake is at least 126 inches from the ground, and the fan/blower must be capable of operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.
 - See Directions for Use, Protection for Handlers, Respiratory Protection and Stop Work Triggers, number 2: *Air-Fan Dilution Equipment*, for when a full-face respirator is required.

Do not wear jewelry, gloves, goggles, tight clothing, rubber protective clothing, or rubber boots when handling. Iodomethane and chloropicrin are heavier than air and can be trapped inside clothing and cause skin injury.

All Handlers (including applicators) present in the application block (i.e., a field or portion of a field treated with a fumigant in any 24-hour period) 5 days (120 hours) after the application is complete (i.e., after tarps have been laid) until the entry restricted period expires must wear:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles.
- In addition, if sensory irritation (tearing, burning, of the eyes or nose) is experienced, handlers must wear at a minimum a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (NIOSH approval number prefix TC-23C). See Directions for Use, Protection for Handlers, Respiratory Protection and Stop Work Triggers, number 3: *Handlers in the Application Block 5 days (120 hours) after the Application is Complete until the Entry Restricted Period Expires*, for when a full-face respirator is required.

Do not wear jewelry, gloves, goggles, tight clothing, rubber protective clothing, or rubber boots when handling. Iodomethane and chloropicrin are heavier than air and can be trapped inside clothing and cause skin injury.

IMPORTANT: an air-supplying respirator [i.e., a respirator connected directly to a clean air source or a self-contained breathing apparatus (SCBA)] is not permitted for routine handler tasks. Such respirators are only permitted in emergencies such as spill or leak or when corrective action is needed to reduce air levels to acceptable levels.

User Safety Requirements

- Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.
- Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside, then wash skin thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to mammals and birds. Do not apply directly to water or to areas where surface water is present or to inter-tidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate. Iodomethane and chloropicrin have certain properties and characteristics in common with chemicals that have been detected in ground water (iodomethane and chloropicrin are highly soluble in water and have low adsorption to soil).

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat, open flames, or sparking electrical equipment. Do not use application devices containing natural rubber, aluminum, magnesium or their alloys.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during the application.

For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), restricted entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

For the entry restricted period and notification requirements, see the **Entry Restricted Period and Notification** sections of this labeling.

PPE for Entry During the Entry Restricted Period: PPE for entry that is permitted by this labeling is listed in the **Hazards to Humans and Domestic Animals** section of this labeling.

HANDLERS

The following activities are prohibited from being performed in the application block (i.e., the field or portion of a field treated with a fumigant in any 24-hour period) by anyone other than persons who have been appropriately trained and equipped as handlers in accordance with the requirements in the Worker Protection Standard (40 CFR Part 170), from the start of the application until the entry restricted period ends (NOTE: persons installing, perforating, removing, repairing, and monitoring tarps are considered handlers for the durations listed below). Those activities include those persons:

- Participating in the application as supervisors, loaders, drivers, tractor co-pilots, shovelers, cross ditchers, or as other direct application participants (the application starts when the fumigant is first introduced into the soil and ends after the fumigant has stopped being delivered/dispensed to the soil);
- Using devices to take air samples to monitor fumigant air concentrations;
- Cleaning up fumigant spills (this does not include emergency personnel not associated with the fumigation application);
- Handling or disposing of fumigant containers;
- Cleaning, handling, adjusting, or repairing the parts of fumigation equipment that may contain fumigant residues;
- Installing, repairing, operating, or removing irrigation equipment in the fumigant application block;
- Entering the application site to perform scouting, crop advising, or monitoring tasks;
- Installing, perforating (cutting, punching, slicing, poking), removing, repairing, or monitoring tarps:
 - until 14 days after application is complete if tarps are not perforated and removed during those 14 days, or
 - until tarp removal is complete if tarps are both perforated and removed less than 14 days after application, or
 - until 48 hours after tarp perforation is complete if they will not be removed within 14 days after application.

NOTE: see Tarp Perforation and/or Removal section on this labeling for requirements about when tarps are allowed to be perforated.

- Performing any handling tasks as defined by the WPS.

PROTECTION FOR HANDLERS

Respiratory Protection and Stop Work Triggers

1. Handlers Wearing Half-Face Air-Purifying Respirators

The following procedures must be followed to determine whether a full-face air-purifying respirator is required or if operations must cease for handlers wearing a half-face air-purifying respirator:

- If at any time any handler experiences sensory irritation (tearing, burning of the eyes or nose) while wearing a half-face air-purifying respirator:
 - A full-face air-purifying respirator must be worn by all handlers who remain in the application block and/or buffer zone, or
 - Operations must cease and handlers not wearing full-face air-purifying respirators must leave the application block and/or buffer zone.
- When full-face air-purifying respirators are worn, then air-monitoring samples for chloropicrin must be collected at least every 2 hours in the breathing zone of a handler performing a representative handling task.
- When using monitoring devices to monitor air concentration levels, a direct reading detection device, such as a Matheson-Kitagawa, Dräger, or Sensidyne device must be used. The devices must have a sensitivity of at least 0.15 ppm for chloropicrin.
- When breathing zone samples are required, they must be taken outside respiratory protection equipment and within a ten inch radius of the handler's nose and mouth.
- If at any time (1) a handler experiences any sensory irritation when wearing a full-face air-purifying respirator; or (2) an air sample is greater than or equal to 1.5 ppm, then all handler activities must cease and handler must be removed from the application block and buffer zone. If operations cease, the emergency plan detailed in the FMP must be implemented.
- Handlers can remove full-face air-purifying respirators or resume work activities if all of the following conditions exist provided that a half-face air-purifying respirator is worn:
 - Two consecutive breathing zone samples for chloropicrin taken at the handling site at least 15 minutes apart must be less than 1.5 ppm.
 - Handlers do not experience sensory irritation.
 - Air-purifying respirator cartridges have been changed,
 - During the collection of air samples a full-face air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.

2. Air Fan Dilution Equipment

The following procedures must be followed to determine whether a full-face air-purifying respirator is required or if operations must cease for tractor drivers and tractor co-pilots using a tractor equipped with a working-area air-fan dilution system:

- If at any time tractor drivers and/or tractor co-pilots experience sensory irritation (tearing, burning of the eyes or nose) then either:
 - A full-face air-purifying respirator must be worn by all tractor drivers and tractor co-pilots who remain in the application block and/or buffer zone or
 - Operations must cease and tractor drivers and tractor co-pilots not wearing respiratory protection must leave the application block and/or buffer zone.
- Tractor drivers and tractor co-pilots can remove full-face air-purifying respirators or resume operations if all of the following conditions exist:
 - Two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show that levels of chloropicrin have decreased to less than 0.15 ppm,
 - Tractor drivers and tractor co-pilots do not experience sensory irritation, and
 - The air-fan dilution system is operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.
 - During the collection of air samples, a full-face air-purifying respirator must be worn by the handler taking air samples. Samples must be taken where the sensory irritation is first experienced.
- When using monitoring devices to monitor air concentration levels, a direct reading detection device, such as a Matheson-Kitagawa, Dräger, or Sensidyne device, must be used. The devices must have a sensitivity of at least 0.15 ppm for chloropicrin.

- When breathing zone samples are required, they must be taken outside respiratory protection equipment and within a ten inch radius of the handler's nose and mouth.
- When full-face air-purifying respirators are worn, then air monitoring samples must be collected at least every two hours in the breathing zone of a representative tractor driver or tractor co-pilot.
- If at any time (1) a tractor driver and/or tractor co-pilot experiences any sensory irritation when wearing a full-face air-purifying respirator, or (2) an air sample is greater than or equal to 1.5 ppm, then all activities must cease and tractor drivers and tractor co-pilots must be removed from the application block and/or buffer zone. If operations cease, the emergency plan detailed in the FMP must be implemented.
- Tractor drivers and co-pilots can resume work activities without full-face air-purifying respirators if all of the following conditions exist:
 - Two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show levels of chloropicrin have decreased to less than 0.15 ppm,
 - Tractor drivers and tractor co-pilots do not experience sensory irritation, and
 - The air-fan dilution system is operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.
 - During the collection of air samples a full-face air purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.
- Work activities can resume if all of the following conditions exist provided that a full-face air-purifying respirator is worn:
 - Two consecutive chloropicrin breathing zone samples taken at the handling site at least 15 minutes apart must be less than 1.5 ppm, but are greater than 0.15 ppm,
 - Tractor drivers and tractor co-pilots do not experience sensory irritation while wearing the full-face air-purifying respirator,
 - Respirator cartridges have been changed, and
 - The air-fan dilution system is operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.
 - During the collection of air samples, a full-face air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.

3. Handlers in the Application Block 5 days (120 hours) after the Application is Complete until the Entry Restricted Period Expires

The following procedures must be followed to determine whether a full-face air-purifying respirator is required or if operation must cease for handlers in the application block after the application is complete

- If at any time any handler experiences sensory irritation (tearing, burning of the eyes or nose) then either:
 - A full-face air-purifying respirator must be worn by all handlers who remain in the application block or
 - Operations must cease and handlers not wearing respiratory protection must leave the application block.
- Handlers can remove full-face air-purifying respirators or resume operations if two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show that levels of chloropicrin have decreased to less than 0.15 ppm provided that handlers do not experience sensory irritation. During the collection of air samples, a full-face air-purifying respirator must be worn by the handler taking air samples. Samples must be taken where the sensory irritation is first experienced.
- When using monitoring devices to monitor air concentration levels, a direct reading detection device, such as a Matheson-Kitagawa, Dräger, or Sensidyne device, must be used. The devices must have a sensitivity of at least 0.15 ppm for chloropicrin.
- When breathing zone samples are required, they must be taken outside respiratory protection equipment and within a ten inch radius of the handler's nose and mouth.

- When full-face air-purifying respirators are worn, then air monitoring samples must be collected at least every two hours in the breathing zone of a handler performing a representative handling task.
- If at any time (1) a handler experiences any sensory irritation when wearing a full-face air-purifying respirator, or (2) an air sample is greater than or equal to 1.5 ppm, then all handler activities must cease and handlers must be removed from the application block. If operations cease, the emergency plan detailed in the FMP must be implemented.
- Handlers can resume work activities without full-face air-purifying respirators if two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show levels of chloropicrin have decreased to less than 0.15 ppm, provided that handlers do not experience sensory irritation. During the collection of air samples a full-face air purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.
- Work activities can resume if all of the following conditions exist provided that a full-face air-purifying respirator is worn:
 - Two consecutive chloropicrin breathing zone samples taken at the handling site at least 15 minutes apart must be less than 1.5 ppm, but are greater than 0.15 ppm,
 - Handlers do not experience sensory irritation while wearing the full-face air-purifying respirator, and
 - Cartridges have been changed.
 - During the collection of air samples, a full-face air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the sensory irritation is first experienced.

Supervision of Handlers

For all applications from the start of the application until the fumigant has stopped being delivered/dispensed into the soil, i.e., after the soil is sealed, an Arysta trained and state certified applicator must be at the fumigation site in the line of sight of the application and must directly supervise all persons performing handling activities.

For handling activities that take place after the fumigant has been delivered/dispensed into the soil until the entry period expires, the Certified Applicator does not have to be on-site, but must have communicated, in a manner that can be understood, to the site owner/operator and handlers responsible for carrying out those activities the information necessary to comply with the label and procedures described in the FMP (e.g., emergency response plans and procedures). Communication activities must be captured in the FMP.

IMPORTANT: This requirement does not override the requirements in the Worker Protection Standard for Agricultural Pesticides for information exchange between owners/operators of agricultural establishments and commercial pesticide applicators.

The certified applicator must provide **Fumigant Safe Handling** information to each handler involved in the application or confirm that each handler participating in the application has received **Fumigant Safe Handling** information in a manner they can understand within the past twelve months. **Fumigant Safe Handling** information will be provided where this product is purchased, or at (insert EPA website).

For all handling tasks at least two handlers trained under the provisions of the WPS 40 CFR 170.230 must be present.

Respirator Fit Testing, Medical Qualification, and Training

Employers must verify that any handler who uses a respirator is:

- Fit-tested and fit-checked using a program that conforms to OSHA's requirements (see 29 CFR Part 1910.134)
- Trained using a program that conforms to OSHA's requirements (see 29 CFR Part 1910.134)
- Examined by a qualified medical practitioner to ensure physical ability to safely wear the style of respirator to be worn. A qualified medical practitioner is a physician or other licensed health care

professional who will evaluate the ability of a worker to wear a respirator. The initial evaluation consists of a questionnaire that asks about medical conditions (such as a heart condition) that would be problematic for respirator use. If concerns are identified, then additional evaluations, such as a physical exam, might be necessary. The initial evaluation must be done before respirator use begins. Handlers must be reexamined by a qualified medical practitioner if their health status or respirator style or use-conditions change. Upon request by local/state/federal/tribal enforcement personnel, employers must provide documentation demonstrating how they have complied with these requirements.

Providing, Cleaning, and Maintaining PPE

The employer of any handler (as stated in this label) must make sure that all handlers are provided and correctly wear the required PPE. The PPE must be cleaned and maintained as required by the Worker Protection Standard for Agricultural Pesticides.

Air-Purifying Respirator Availability

At a minimum two handlers must have the appropriate air-purifying respirator and cartridges available and these handlers must be fit-tested, trained, and medically examined.

The employer of any handler must confirm that an air-purifying respirator and appropriate cartridges of the type specified in the PPE section of this labeling are immediately available for each handler who will wear one. This must be documented in the FMP.

Cartridges or canisters must be replaced when odor or irritation from this product becomes apparent, if the measured concentration of chloropicrin is greater than or equal to 1.5 ppm, or after 8 hours of use, whichever occurs first.

Air-Rescue Device Availability

The employer of any handler must confirm that at least one air-rescue device (e.g., SCBA) is on-site and is ready for use in case of an emergency. This must be documented in the FMP.

Exclusion Of Non-Handlers From Application Block:

The Certified Applicator supervising the application and the owner/operator of the establishment where the fumigation is taking place must make sure that all persons who are not trained and PPE-equipped and who are not performing one of the handling tasks as stated in this labeling are excluded from the application block during the entry restricted period and the buffer zone during the buffer zone period.

Entry Restricted Period

Entry (including early entry that would otherwise be permitted under the WPS) by any person, other than a correctly trained and PPE-equipped handler who is performing a handling task listed on this labeling, is PROHIBITED from the start of the application until:

- o 5 days after application is complete if tarps are not perforated and removed for at least 14 days following application, NOTE: Persons installing, repairing, or monitoring tarps are handlers until 14 days after the application is complete if tarps are not perforated and removed during those 14 days, or
- o 48 hours after tarp perforation is complete if tarps will not be removed for at least 14 days following application, or
- o Tarp removal is completed if tarps are both perforated and removed less than 14 days after application.

NOTE: See Tarp Perforation and/or Removal section on this labeling for requirements about when tarps are allowed to be perforated.

Notification

Notify workers of the application by warning them orally and by posting Fumigant Treated Area signs. The Fumigant Treated Area signs must bear the skull and crossbones symbol and state:

- (1) "DANGER/PELIGRO"
- (2) "Areas under fumigation, DO NOT ENTER/NO ENTRE"
- (3) Iodomethane and Chloropicrin Fumigants In Use

- (4) Date and time of fumigation
- (5) Date and time entry restricted period is over
- (6) MIDAS 50:50, and
- (7) Name, address, and telephone number of the Certified Applicator in charge of the fumigation.

Post the Fumigant Treated Area sign instead of the WPS sign for this application but follow all WPS requirements pertaining to location, legibility, size and timing of posting and removal.

Post the Fumigant Treated Area signs at all entrances to the application block (ie, the field or portion of a field treated with a fumigant in any 24-hour period.)

Tarp Perforation and/or Removal

IMPORTANT: Persons perforating, repairing, removing, and/or monitoring tarps are defined, within certain time limitations, as handlers (see handlers as stated in this labeling) and must be provided the PPE and other protections for handlers as required on this labeling and in the Worker Protection Standard for Agricultural Pesticides.

- Standard tarps must not be perforated until a minimum of 5 days (120 hours) have elapsed after the fumigant injection into the soil is complete (eg, after tarps have been laid), unless a weather condition exists which necessitates the need for early perforation or removal, see **Early Tarp Removal for Broadcast Applications Only** and **Early Tarp Perforation for Flood Prevention Activities** sections. Highly retentive tarps (on an Arysta approved list) must not be perforated until a minimum of 10 days (240 hours) have elapsed after the fumigation injection into the soil is complete.
- If tarps will be removed before planting, tarp removal must not begin until at least 2 hours after tarp perforation is complete.
- If tarps will not be removed before planting, planting or transplanting must not begin until at least 48 hours after the tarp perforation is complete.
- If tarps are left intact for a minimum of 14 days after fumigant injection into the soil is complete, planting or transplanting may take place while the tarps are being perforated.
- Each tarp panel used for broadcast fumigation must be perforated.
- Tarps used for fumigations may be perforated manually **ONLY** for the following situations:
 - At the beginning of each row when a coulter blade (or other device which performs similarly) is used on a motorized vehicle such as an ATV.
 - In fields that are 1 acre or less.
 - During flood prevention activities.
- In all other instances tarps must be perforated (cut, punched, poked, or sliced) only by mechanical methods.
- Tarp perforation for broadcast fumigations must be completed before noon.
- For broadcast fumigations, tarps must not be perforated if rainfall is expected within 12 hours.
- **Early Tarp Removal for Broadcast Applications Only:**
 - Tarps may be removed before the required 5 days (120 hours) or 10 days (240 hours) if adverse weather conditions have compromised the integrity of the tarp, provided that the compromised tarp poses a safety hazard. *Adverse weather* includes high wind, hail, or storms that blow tarps off the field and create a hazard, eg, tarps blowing into power lines and onto roads. A *compromised tarp* is a tarp that due to an adverse weather condition is no longer performing its intended function and is creating a hazard.
 - If tarps are removed before the required 5 days (120 hours) or 10 days (240 hours) have elapsed due to adverse weather, the events must be documented in the post-application summary.
- **Early Tarp Perforation for Flood Prevention Activities**
 - Tarp perforation is allowed before the 5 or 10 days have elapsed.
 - Tarps must be immediately retucked and packed after soil removal.

Buffer Zone

The area adjacent to the treated area is referred to as the buffer zone. The buffer zone shall extend from the edge of the treated area in all directions. See Buffer Zone Table. The minimum buffer zone distance shall be 25 feet.

The Certified Applicator supervising the soil fumigation is responsible for the following:

1. Calculating the appropriate size of the buffer zone that must be maintained from the start of the application until 48 hours following the end of the application.
2. Establishing and maintaining the buffer zone from the start of the application until 48 hours following the end of the application. The Certified Applicator must use an appropriate means to manage and maintain the buffer zone such as posting Buffer Zone signs around the perimeter of the buffer zone at potential points of entry, using trained workers to patrol the buffer zone, or other equivalent means. If Buffer Zone signs are used, they must be posted from the start of the application until 48 hours following the end of the application and must be removed within 3 days of the end of the buffer zone period. The Buffer Zone signs must include the same warning symbol and statements required for Fumigant Treated Area signs as stated on this label with the exception that signs will indicate "Fumigant Buffer Zone" at the top of the sign and will delete the statement "areas under fumigation".
3. Ensuring that unprotected workers and bystanders do not enter the buffer zone, from the start of the application until 48 hours following the end of the application. Exception: Unprotected workers and bystanders may travel through (but not engage in any activity in) the buffer zone during the application and the 48-hour period following the end of the application, provided their total exposure time in any 24-hour period is 15 minutes or less. However, travel by unprotected workers or bystanders through the fumigated area itself is prohibited during the entire Entry Restricted period. Handlers protected with required Personal Protective Equipment (PPE) may work in buffer zones. See the PERSONAL PROTECTIVE EQUIPMENT section.
4. Ensuring application site has a distinctive buffer zone. The buffer zone of the field to be treated cannot overlap the buffer zone of another field treated within the last 48 hours.
5. Ensuring that there are no occupied nursing homes, hospitals, or prisons; and no occupied licensed schools, licensed day care facilities and licensed assisted living facilities (licensed by state or local governments) within ¼ mile of the fumigated area during the buffer zone period.

Determining Buffer Zone Distance

- Determine the size of the buffer zone using the following Buffer Zone Table.
- The size of the buffer zone will be dependent on the following three factors:
 - The number of field acres that are being treated with MIDAS 50:50.
 - The pounds of MIDAS 50:50 that are being applied per treated acre.
 - Buffer zone reduction credits.

Buffer Zone Table

MIDAS 50:50 Application Rate (Lbs per Treated Acre) ⁴	SIZE OF FIELD IN ACRES (Buffer zone distance in feet) ^{1,2}							
	Up to 5 Acres	6 – 10 Acres	11-15 Acres	16- 20 Acres	21-25 Acres	26-30 Acres	31-35 Acres	36-40 ³ Acres
125	25	40	75	110	130	145	165	180
150	25	45	90	130	155	175	195	215
175	25	50	100	150	175	200	225	250
200	30	60	120	175	205	235	265	290
210	30	60	120	180	210	240	270	300
240	35	70	140	210	245	280	315	345
300	45	90	175	260	305	345	390	430
350	50	100	200	300	350	400	450	500

1. For rates not listed on this table, use the buffer zone for the next highest rate, or use the following calculation to determine the exact buffer zone:

Buffer Zone for Application Rate Not Listed = Known Buffer Zone on Table X Application Rate Not Listed

Rate of Application for Known Buffer Zone

2. Buffer Zone Reduction Credits:

Reduce buffer zone by 10% for each factor listed below:

- Use of flat fume / broadcast application
- Use of Highly Retentive tarps. Highly Retentive tarps for which credit can be applied must be on an Arysta approved list. Examples of Arysta approved tarps are Canislii Brand Metalized 1.3 ml, Pliant Blockade® VIF 1.25 ml, and Pliant Metalized 1.0-1.25.
- Application to soils having >3% organic matter. Refer to the USDA or USGS Soil Survey Maps for the treated area that identify the range of organic matter and / or a documented soil survey report that lists range of % organic matter for the treated area. Collection of samples for analysis of soil in the treated area should follow procedures as per USDA's Natural Resource Conservation Services methods. Information on soil sampling can be found at www.soil.usda.gov.

For example, if the Buffer Zone is 50 feet and the application qualifies for a buffer zone reduction credit such as use of Metalized tarp, then the buffer zone can be reduced by 10%, i.e. reduced by 5 feet based on the following calculation: $50 \text{ ft} - (50 \text{ ft} \times 10\%) = 45 \text{ feet}$.

If the application qualifies for two buffer zone reduction credits such as use of a highly retentive tarp and soil with >3% organic matter, then the buffer zone can be reduced by 20%, i.e. reduced by 10 feet based on the following calculation: $50 \text{ ft} - (50 \text{ ft} \times 20\%) = 40 \text{ feet}$.

3. Applications are limited to 40 contiguous acres or less per day.
4. For raised bed applications, the treated area is the raised bed not the untreated furrows. As an example, if a raised bed field is 50% raised bed (treated) and 50% furrow (untreated), and 350 lbs of MIDAS 50:50 is applied to the raised beds of the field, then the effective application rate to the treated raised bed is 350 lbs per treated acre; and that is the rate that would determine the buffer zone.
5. Contact your Arysta LifeScience representative for approved tarps and rate reduction recommendations.

Note: Minimum allowable buffer zone is 25 feet regardless of buffer zone reduction credits.

Buffer Zone for Tree Replant Applications

- 25 feet if the application rate is less than 100 lbs MIDAS 50:50 per acre.
- 50 feet if application rate is 100 to 249 lbs MIDAS 50:50 per acre, and
- 100 feet if the application rate is 250 to 350 lbs MIDAS 50:50 per acre.

GENERAL INFORMATION AND INSTRUCTIONS

This fumigant is a highly hazardous material. All uses of this fumigant are covered under the Worker Protection Standard, and must be conducted in accordance with all of the requirements of the Worker Protection Standard (40 CFR Part 170). It is a restricted use pesticide that must only be used by Certified Applicators, certified by the state and trained by Arysta, in the proper handling, worker protection, and application of MIDAS 50:50 soil fumigant and handlers under their direct supervision. Before using, read the entire label and follow all use directions and precautions. All persons working with this fumigant must be knowledgeable about the hazards and trained in the use of required air-purifying respirator equipment and detector devices, emergency procedures and proper use of the fumigant.

Control of Soil Borne Pests: MIDAS 50:50 controls soil-borne pests including nematodes, insects, weed seeds, and diseases.

MIDAS 50:50 will control the following pests when present in soil at the time of treatment:

Weed Seeds, including broadleaf weeds such as nutsedge, pigweed, broomrape and lambsquarters, and grasses such as bermudagrass, and annual bluegrass. Effectiveness against hard seed weeds, such as mallow, dodder, morning glory, and certain leguminous weeds may be variable.

Plant-parasitic Nematodes, such as root-knot, root lesion (meadow), cyst, citrus, burrowing, false root-knot, lance, spiral, ring, sting, stubby root, dagger, awl, sheath and sting (stylet) nematodes.

Soil-borne Insects, such as wireworms, cutworms, grubs, rootworms, ants and garden symphylans.

Soil-borne Diseases, such as *Verticillium*, *Pythium*, *Rhizoctonia*, *Phytophthora*, and *Fusarium*.

MIDAS 50:50 is not to be used as a preventative treatment for pests that may be introduced after the fumigant has been applied and/or tarps removed. To reduce the potential for the re-introduction of pests (nematodes, weed seed and disease); avoid the use of irrigation water, transplants or equipment that could carry pests into the planting area. Avoid moving infested soil back into the treated area through cultivation or other means.

GENERAL USE PRECAUTIONS

The maximum application rate for preplant soil uses is 175 lbs ai per acre of iodomethane and 175 lbs ai per acre of chloropicrin.

- Follow all local government instructions for posting of treated areas and post all treated areas with warning signs.
- Comply with all local ordinances and regulations.
- Do not apply within ¼ mile of nursing homes, hospitals or prisons, or licensed schools, licensed day care facilities or licensed assisted living facilities (licensed by state or local governments) that will be occupied during the buffer zone period.
- Applications are limited to 40 contiguous acres or less per day.
- Never fumigate alone. A minimum of two persons must be present during handling and application of soil fumigants. These persons must be Certified Applicators or handlers under their direct supervision and within the line of sight of the Certified Applicator.
- Additional instructions must be made available to handlers in the mechanical operation of the tractor and how to safely work with the operator while fumigating.
- Always handle this product in the open, with all handlers positioned "upwind" from the container and/or where there is adequate ventilation.
- When fumigating from a tractor, it is required that 5 gallons of water be carried on the tractor and readily available for rinsing and cleaning purposes. An additional 5 gallons of water must be available in the service truck. This water must be potable and in containers marked "Decontamination water not to be used for drinking".
- For broadcast/flat fum applications, keep all pets, livestock and other domestic animals out of the treated areas until tarps have been removed.
- For raised bed applications, keep all pets, livestock and other domestic animals out of the treated areas for 5 days. Most raised bed applications will not result in tarp removal.
- Do not allow entry by unprotected persons into the fumigated area until the Fumigant Treated Area signs are removed.

SPILL AND LEAK PROCEDURES

- For Spill and Leak PPE requirements refer to the Personal Protective Equipment, All Handlers (including applicators) performing tasks with liquid contact potential section on this label.
- Cease all operations if any leak develops in the fumigation system.
- Evacuate everyone from the immediate areas of the spill or leak.
- Approach the area from the upwind side. Work upwind to repair leak(s), if possible.

- Only correctly trained and PPE-equipped handlers are permitted to enter. Do not permit entry into the spill or leak area by any other person until the concentration of chloropicrin is measured to be less than 0.15 ppm.
- Allow spilled fumigant to evaporate or to absorb onto vermiculite, dry sand, earth, or similar absorbent material. Such material should be disposed of on site or at an approved disposal facility.
- Contaminated soil, water and other cleanup debris may be hazardous waste. Report any spill that exceeds 200 lbs (12.6 gallons of product) to the National Response Center at 1-800-424-8802.

SITE-SPECIFIC FUMIGATION MANAGEMENT PLAN (FMP)

Prior to the start of fumigation, the Certified Applicator supervising the application must verify that a site-specific FMP exists for each application block (ie, a field or portion of a field treated with a fumigant in any 24-hour period). In addition, an agricultural operation fumigating multiple application blocks may format the FMP in a manner whereby all of the information that is common to all the application blocks is captured once, and any information unique to a particular application block or blocks is captured in subsequent sections.

The FMP must be prepared by the Certified Applicator, the site owner/operator, registrant or other party.

The Certified Applicator must verify in writing (sign and date) that the site-specific FMP(s) reflects current site conditions before the start of fumigation.

Each site-specific FMP must contain the following elements:

- Applicator information (name, phone number, pesticide applicator license and/or certificate number, employer name, employer address)
- General site information
 - Application block location (e.g., county, township-range-section quadrant), address, or global positioning system (GPS) coordinates
 - Name, address, and phone number of owner/operator of the application block
 - Diagrams and maps
 - Identify nursing homes, hospitals, prisons, licensed schools, licensed day care facilities, or licensed assisted living facilities (licensed by state or local governments) within ¼ mile of the fumigated area, and document how it was determined that such sites would be unoccupied during the application period.
- General application information (target application date/window, brand name of fumigant, EPA registration number)
- Tarp information and procedures for repair, perforation, and removal
 - Brand name, lot number, thickness
 - Name and phone number of person responsible for repairing tarps
 - Schedule for checking tarps for damage, tears, and other problems
 - Maximum time following notification of damage that the person(s) responsible for tarp repair will respond
 - Minimum time following application that tarp will be repaired
 - Minimum size of damage that will be repaired
 - Other factors used to determine when tarp repair will be conducted
 - Name and phone number of person responsible for perforating and/or removing tarps (if other than Certified Applicator)
 - Equipment/methods used to perforate tarps
 - Schedule and target dates for perforating tarps
 - Schedule and target dates for removing tarps
- Soil conditions (description of soil texture in application block, method used to determine soil moisture)
- Weather conditions (summary of forecasted conditions for the day of the application and the 48-hour period following the fumigant application)
 - Wind speed
 - Inversion conditions (e.g., shallow, compressed (low-level) temperature inversion)
 - Air stagnation advisory

- Buffer Zones
 - Application method
 - Application rate (pounds of Midas 50:50)
 - Application block size (acres)
 - Credits applied
 - Description of areas in the buffer zone that are not under the control of the owner/operator of the application block and how it was verified that these structures were unoccupied during the buffer zone period.
- Air-purifying respirators, air-rescue devices, and other personal protective equipment (PPE) for handlers (handler task, protective clothing, air-purifying respirator type, respirator cartridge type, respirator cartridge replacement schedule, air-rescue device type, eye protection, gloves, other PPE)
- Air-Fan Dilution System: Verification that the fan/blower intake is at least 126 inches from the ground, and the fan/blower is capable of operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.
- Emergency procedures (evacuation routes, locations of telephones, contact information for first responders, local/state/federal/tribal contacts, key personnel and emergency procedures/responsibilities in case of an incident, equipment/tarp/seal failure or complaints, or other emergencies).
- Fumigant Treated Area and/or Buffer Zone (if used) posting procedures (person(s) who will post Fumigant Treated Area and/or Buffer Zone (if used) signs, location of Fumigant Treated Area and/or Buffer Zone (if used) signs, procedures for Fumigant Treated Area and/or Buffer Zone (if used) sign removal)
- Plan describing how communication will take place between the applicator, land owner/operator, and other on-site handlers (e.g., tarp perforators/removers, irrigators) for complying with label requirements (e.g., timing of tarp perforation and removal, PPE, buffer zone location).
 - Name and phone number of persons contacted
 - Date contacted
- Authorized on-site personnel
 - Names, addresses and phone numbers of handlers
 - Names, addresses and phone numbers for employers of handlers
 - Tasks that each handler is authorized and trained to perform
 - For handlers designated to wear air-purifying respirators:
 - date of medical qualification to wear an air-purifying respirator
 - date of air-purifying respirator training, and
 - date of fit-testing for the air-purifying respirator.
- Air monitoring plan
 - If sensory irritation is experienced, indicate whether operations will be ceased or operations will continue with an air-purifying respirator
 - If the intention is to cease operations when sensory irritation is experienced, provide the name, address, and phone number of the handler that will perform monitoring activities prior to operations resuming
 - When air-purifying respirators are worn:
 - Representative handler tasks to be monitored
 - Monitoring equipment to be used and timing of monitoring
- Good Agricultural Practices (GAPs)
 - Description of applicable mandatory GAPs
 - Measurements and documentation to ensure GAPs are achieved (e.g., measurement of soil and other site conditions)
- Description of hazard communication. (The application block has been posted in accordance with the label. Non-handlers are excluded from the buffer zone. Pesticide product labels and material safety data sheets are on-site and readily available for employees to review.)
- Record-keeping procedures (the owner/operator of the application block as well as the Certified Applicator must keep a signed copy of the site-specific FMP for 2 years from the date of application).

For situations where an initial FMP is developed and certain elements do not change for multiple fumigation sites (e.g., applicator information, authorized on-site personnel, record-keeping procedures,

emergency procedures) only elements that have changed need to be updated, in the site-specific FMP provided the following:

- The Certified Applicator supervising the application has verified that those elements are current and applicable to the application block before it is fumigated.
- Record-keeping requirements are followed for the entire FMP (including elements that do not change).

Once the application begins, the Certified Applicator must make a copy of the FMP available for viewing by handlers involved in the fumigation. The Certified Applicator or the owner operator of the application block must provide a copy of the FMP to any local/state/federal/tribal enforcement personnel who request the FMP. In the case of an emergency, the FMP must be made immediately available when requested by local/state/federal/tribal emergency response and enforcement personnel.

Within 30 days of completing the application portion of the fumigation process, the Certified Applicator supervising the application must complete a post-application summary that describes any deviations from the FMP that have occurred, measurements taken to comply with GAPs, monitoring results as well as any complaints and/or incidents that have been reported to him/her.

The Post-Application Summary must contain the following elements:

- Actual date of the application, application rate, and size of application block fumigated
- Summary of weather conditions on the day of the application and during the 48-hour period following the fumigant application
- Soil temperature measurement (if air temperatures were above 100 degrees F in any of the 3 days prior to the application)
- Tarp damage and repair information (if applicable)
 - Location and size of tarp damage
 - Description of tarp/tarp seal/tarp equipment failure
 - Date and time of tarp repair
- Tarp perforation/removal details (if applicable)
 - Description of tarp removal (if different than in the FMP)
 - Date tarps were perforated
 - Date tarps were removed
- Complaint details (if applicable)
 - Person filing complaint (e.g., on-site handler, person off-site)
 - If off-site person, name, address, and phone number of person filing complaint
 - Description of control measures or emergency procedures followed after complaint.
- Description of incidents, equipment failure, or other emergency and emergency procedures followed (if applicable)
- Details of elevated air concentrations monitored on-site (if applicable)
 - Location of elevated air concentration levels
 - Description of control measures or emergency procedures followed
 - Air monitoring results
 - When sensory irritation experienced:
 - Date and time of sensory irritation
 - Handler task/activity
 - Handler location where irritation was observed
 - Resulting action (e.g. cease operations, continue operations with air-purifying respirators)
 - When using a direct read instrument:
 - Sample date and time
 - Handler task/activity
 - Handler location
 - Air concentration
 - Sampling method
- Date of Fumigant Treated Area sign removal

- Date of Buffer Zone sign removal (if used)
- Any deviations from the FMP
- Record-keeping procedures (the owner/operator of the application block as well as the Certified Applicator must keep a signed copy of the post-application summary for 2 years from the date of application).

Mandatory Good Agricultural Practices (GAPs)

The following GAPs must be followed during all fumigant applications. All measurements and other documentation planned to ensure that the mandatory GAPs are achieved must be recorded in the FMP and/or post-application summary.

- MIDAS 50:50 must be transferred through connecting hoses, pipes, and/or couplings sufficiently tight to prevent workers or other persons from coming in contact with the liquid.
- All hoses, piping, and tanks used in connection with this product shall be of a type appropriate for use under the pressure and vacuum conditions to be encountered.
- Hoses between any fumigant container and the flow divider must be Teflon® hoses reinforced with stainless steel wire braid or its equivalent.
- External sight gauges, if applicable, shall be equipped with a valve so that pipes to sight gauge can be shut off in case of breakage or leakage.
- The mechanical transfer system must be adequate to make necessary measurements of the pesticide being used.
- Shut-off devices must be installed on the exit end of all cylinder connections and at all disconnect points to prevent leakage of product when the transfer is stopped and hose is removed or disconnected.
- The pressure in hoses used to move the product must not exceed the manufacturer's maximum pressure specifications.
- Check equipment to ensure good condition and integrity prior to each use.

Tarps (tarps are required for all Midas 50:50 applications except for tree-hole applications). Tarps must be installed immediately after the fumigant is applied to the soil.

A written tarp plan must be developed and included in the FMP. The plan must include:

- schedule and procedures for checking tarps for damage, tears, and other problems
- plans for determining when and how repairs to tarps will be made, and by whom
- minimum time following injection that tarp will be repaired
- minimum size of tarp damage that will be repaired
- other factors used to determine how and when tarp repair will be conducted
- schedule, equipment, and methods used to perforate tarps
- aeration plans and procedures following perforation of tarp, but prior to tarp removal or planting/transplanting
- schedule, equipment, and procedures for tarp removal

Weather Conditions

- Prior to fumigation the weather forecast for the day of the application and the 48-hour period following the fumigation must be checked to determine if unfavorable weather conditions exist (see *Identifying Unfavorable Weather Conditions* section) or are predicted and whether fumigation should begin.
- Wind speed at the application site must be a minimum of 2 mph at the start of the application or forecasted to reach at least 5 mph during the application.
- Do not apply if a shallow, compressed (low-level) temperature inversion is forecast to persist for more than 18 consecutive hours for the 48-hour period after the start of application, or if there is an air stagnation advisory issued by the National Weather Service in effect for the area in which the fumigation is planned.

- Detailed local forecasts for weather conditions, wind speed, and air stagnation advisories may be obtained on-line at: <http://www.nws.noaa.gov>, or by contacting your local National Weather Service Forecasting Office.
- **Identifying Unfavorable Weather Conditions** - Unfavorable weather conditions block upward movement of air, which results in trapping fumigant vapors near the ground. The resulting air mass can move off-site in unpredictable directions. These conditions typically exist prior to sunset and continue past sunrise and persist as late as noontime. Unfavorable conditions are common on nights with limited cloud cover and light to no wind and their presence can be indicated by ground fog or smog and can also be identified by smoke from a ground source that flattens out below a ceiling layer and moves laterally in a concentrated cloud.

Soil Preparation

- Soil must be properly prepared and at the surface generally be free of clods that are golf ball size or larger. The area to be fumigated must be tilled to a depth of at least 5 to 8 inches.
- Field trash must be properly managed. Residue from a previous crop must be worked into the soil to allow for decomposition prior to fumigation. Little or no crop residue shall be present on the soil surface. Crop residue that is present must not interfere with the soil seal. Removing the crop residue prior to fumigation is important to limit the natural "chimneys" that occur in the soil when crop residue is present. These "chimneys" allow the soil fumigants to move through the soil quickly and escape into the atmosphere. This may create potentially harmful conditions for workers and bystanders and limit the efficacy of the fumigant. However, crop residue on the field serves to prevent soil erosion from both wind and water and is an important consideration. To accommodate erosion control, fumigant efficacy, and human health protection, clear fields of crop residue as close to the timing of the fumigation as possible to limit the length of time that the soil would be exposed to potentially erosive weather conditions.

Prior to All Applications:

- Ensure that application equipment does not contain components made of natural rubber, aluminum, magnesium or their alloys.

During All Applications:

- Do not change cylinders when the fumigant system is under pressure. Change cylinders with all cylinder valves in the off position.

Following All Applications:

- To minimize the potential for crop injury, allow the fumigant to dissipate before planting a crop. Seeds may be used as a bioassay to determine if MIDAS 50:50 is present in the soil at concentrations sufficient to cause plant injury. See fumigation tables for planting requirements specific to the different application methods.
- Fumigation of highly acidic soils or those high in organic matter can cause ammonia toxicity to plants and or elevated levels of soluble salts in the soil causing phytotoxicity. Analyze soil following fumigation and fertilize as indicated. Avoid those fertilizers using ammonium salts.
- When using standard tarps, planting shall not occur for at least 10 days after application.
- When using highly retentive tarps, planting shall not occur for at least 14 days after application.

MANDATORY GOOD AGRICULTURAL PRACTICES (GAPS) FOR MIDAS 50:50 BEDDED AND BROADCAST SHANK APPLICATIONS

In addition to the GAPS required for all Midas 50:50 soil fumigation applications, the following GAPS apply for bedded and broadcast shank injection applications:

Soil Preparation

- Allow time for complete voiding of material in the buried shanks following the closure of the shutoff valve and before removing the shanks from the soil.

- In the event that trash is pulled up with the shanks after completing a treatment pass, the trash must be covered with the tarp and the edges of the tarp must be buried under at least 4 inches of compacted soil before making the next pass through the field.

Soil Temperature

- The soil temperature at the depth of injection must not be less than 55° F or exceed 90° F at the beginning of the application.
- If air temperatures have been above 100° F in any of the three days prior to application, then soil temperature must be measured and recorded in the FMP.

Soil Moisture

- The soil must be moist 9 inches below the surface. The amount of moisture needed will vary according to the soil type. Surface soil generally dries rapidly and must not be considered in this determination.
- Soil moisture must be determined by one of the following methods:
 - The USDA Feel and Appearance Method for testing, or
 - An instrument, such as a tensiometer.
- If there is insufficient moisture 9 inches below the surface, the soil moisture must be adjusted. If irrigation is not available and there is adequate soil moisture below 9 inches, soil moisture can be adjusted by disking or plowing before fumigant injection. To conserve existing soil moisture, pretreatment irrigation or pretreatment tillage should be done as close to the time of application as possible.
- Measure soil moisture at a depth of 9 inches at either end of the field, no more than 48 hours prior to application.

Soil moisture determination using the USDA Feel and Appearance Method

- For **coarse textured soils** (fine sand and loamy fine sand) there must be enough moisture (50 to 75 percent available soil water moisture) so the soil is moist, forms a weak ball with loose and clustered sand grains on fingers, darkened color, moderate water staining on fingers; will not ribbon.
- For **moderately coarse textured soils** (sandy loam and fine sandy loam) there must be enough moisture (50 to 75 percent available soil water moisture) so the soil is moist, forms a ball with defined finger marks, very light soil/water staining on fingers, darkened color will not stick.
- For **medium textured soils** (sandy clay loam, loam, and silt loam) there must be enough moisture (50 to 75 percent available soil water moisture) so the soil is moist, forms a ball, very light staining on fingers, darkened color, pliable, and forms a weak ribbon between the thumb and forefinger.
- For **fine textured soils** (clay, clay loam, and silty clay loam) there must be enough moisture (50 to 75 percent available soil water moisture) so the soil is moist, forms a smooth ball with defined finger marks, light soil/water staining on fingers, ribbons between thumb and forefinger.
- For **fields with more than one soil texture**, soil moisture content in the lightest textured (most sandy) areas must comply with this soil moisture requirement. Whenever possible, the field should be divided into areas of similar soil texture and the soil moisture of each area should be adjusted as needed. Coarser textured soils can be fumigated under conditions of higher soil moisture than finer textured soils; however, if the soil moisture is too high, fumigant movement will be retarded and effectiveness of the treatment will be reduced. Previous and/or local experience with the soil to be treated or the crop to be planted can often serve as a guide to conditions that will be acceptable. If there is uncertainty in determining the soil moisture content of the area to be treated, a local extension service agent, soil conservation service specialist, or pest control advisor (agriculture consultant) should be consulted for assistance.

Application Depth

- **For Tarped-Broadcast and Tarped-Bedded Applications:** The injection point must be a minimum of 8 inches from the nearest final soil/air interface. The application depth in preformed beds must not be below the bed furrow.

Prevention of End Row Spillage

- Do not apply or allow fumigant to spill onto the soil surface. For each injection line either have a check valve located as close as possible to the final injection point, or drain/purge the line of any remaining fumigant prior to lifting injection shanks from the ground.
- Do not lift injection shanks from the soil until the shut-off valve has been closed and the fumigant has been depressurized (passively drained) or purged (actively forced out via air compressor) from the system.

Calibration, Set-up, Repair, and Maintenance for Application Rigs

- Brass, carbon steel or stainless steel fittings must be used throughout. Polyethylene tubing, polypropylene tubing, Teflon® tubing or Teflon® -lined steel braided tubing must be used for all low pressure lines, drain lines, and compressed gas or air pressure lines. All other tubing must be Teflon® -lined steel braided.
- Galvanized, PVC, nylon or aluminum pipe fittings must not be used.
- All rigs must include a filter to remove any particulates from the fumigant, and for pressurized systems a check valve to prevent backflow of the fumigant into the pressurizing cylinder or the compressed air system.
- Rigs must include a flowmeter or a constant pressure system with orifice plates to insure the proper amount of fumigant is applied.
- To prevent the backflow of fumigant into the compressed gas cylinder (eg. nitrogen, other inert gas, compressed air), if used, applicators must:
 - When applying MIDAS 50:50 from steel cylinders, using compressed gas, ensure that positive pressure is maintained in the cylinder at not less than 100 psi during the entire time it is connected to the application rig, (*This is not required for a compressed air system that is part of the application rig because if the compressor system fails the application rig will not be operable*).
 - When applying MIDAS 50:50 from drum-in-drum poly-totes, using compressed gas, maintain a positive pressure of not less than 35 psi during the entire time it is connected to the application rig. (*This is not required for a compressed air system that is part of the application rig because if the compressor system fails the application rig will not be operable*).
 - Ensure that application rigs are equipped with properly functioning check valves between the compressed gas cylinder or compressed air system and the fumigant cylinder. The check valve is best placed on the outlet side of the pressure regulator, and is oriented to only allow compressed gas to flow out of the cylinder or compressed air out of the compressed air system.
 - Always pressurize the system with compressed gas or by use of a compressed air system before opening the fumigant cylinder valve.
- Before using a fumigation rig for the first time, or when preparing it for use after storage, the operator must check the following items carefully:
 - Check the filter, and clean or replace the filter element as required.
 - Check all tubes and chisels to make sure they are free of debris and obstructions.
 - Check and clean the orifice plates and screen checks, if installed.
 - Pressurize the system with compressed gas or compressed air, and check all fittings, valves, and connections for leaks using soap solution.
- Install the fumigant cylinder, and connect and secure all tubing. Slowly open the compressed gas or compressed air valve, and increase the pressure to the desired level. Slowly open the fumigant cylinder valve, always watching for leaks.
- When the application is complete, close the fumigant cylinder valve and blow residual fumigant out of the fumigant lines into the soil using compressed gas or compressed air. At the end of the application, disconnect all fumigant cylinders from the application rig. At the end of the season, seal all tubing openings with tape to prevent the entry of insects and dirt.

Application equipment must be calibrated and all control systems must be working properly. Proper calibration is essential for application equipment to deliver the correct amount of fumigant uniformly to the soil. Refer to the manufacturer's instructions on how to calibrate your equipment, usually the equipment manufacturer, fumigant dealer, or Cooperative Extension Service can provide assistance.

Soil Sealing

Raised Bed Applications

- Use tractor mounted chisels spaced no more than 12 inches apart. Injection spacing of 12 inches or less is typically performed with a multiple shank applicator. The treated ground must be sealed using either:
 - Soil sealing at time of application: The treated ground must be sealed using closing shoes, roller, compaction roller, cultipacker, or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarp being laid down (with fumigant injection) by tarp-laying equipment mounted on the application tractor; or
 - Bed shaper: The chisels shall be placed with the injection point under the bed shaper, and the tarp shall be laid down simultaneously (with fumigant injection) by tarp-laying equipment mounted on the application tractor; or
 - Combination bed former and bed shaper: The chisels shall be placed between the bed former and the bed shaper. The tractor with the tarp-laying equipment shall immediately follow the application tractor.

Broadcast/Flat Fume Applications

- Use tractor mounted chisels spaced no more than 12 inches apart.
 - Soil sealing at time of application: The treated ground must be sealed using closing shoes, roller, compaction roller, cultipacker or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarp being laid down (with fumigant injection) by tarp-laying equipment mounted on the application tractor.

Tree Replant Application Using Handheld Equipment: Mandatory GAPS

This application method is used when MIDAS 50:50 is applied to individual tree sites in an existing orchard where shank applications are not possible.

In addition to the GAPS required for all MIDAS 50:50 soil fumigation applications, the following GAPS apply for MIDAS 50:50 tree replant applications:

Site Preparation

- Remove the tree stump and primary root system in each individual tree-site with a back-hoe or other similar equipment, for example an auger.
- The hole must be backfilled with soil before application.

Application Depth

- The fumigant must be injected at least 18 inches into the soil.

System Flush

- Before removing the application wand from the soil the wand must be cleared using nitrogen or compressed air.

Soil Sealing

- After the wand is cleared and removed from the soil, the injection hole must be either covered with soil and tamped; or the soil must be compacted over the injection hole.

MIDAS 50:50 PRE-PLANT FIELD FUMIGATION METHODS

Fumigation with MIDAS 50:50 shall only be performed in accordance with the following three application techniques: 1) Raised Bed Application, 2) Broadcast/Flat Fume Application, or 3) Tree Replant Application Using Handheld Equipment (stone fruit, nut trees, vines, and field-grown ornamentals only). Application methods and rates of application for each of these methods are discussed in detail below.

Application Rates for Raised Bed Fumigation: Rates in the table below are given in pounds of MIDAS 50:50 per broadcast acre. The amount of product applied will be proportionate to the row spacing and width of the raised bed. To calculate the amount of product to be applied, multiply the application rate in lbs MIDAS 50:50/broadcast acre by the appropriate modifier from the Field Rate Modifier Table provided below.

RAISED BED SOIL FUMIGATION TABLE		
Crop	MIDAS 50:50 Per Broadcast Acre ¹	Time Between ² Application and Planting
Field-Grown Ornamentals Peppers Strawberries Tomatoes	Standard Tarp 200 - 350 lbs/Broadcast Acre (12.6 – 22 gal/Broadcast Acre)	10 – 14 days ³
	Highly Retentive Film⁴ 150-200 lbs/Broadcast Acre (9.4 – 12.6 gal/Broadcast Acre)	14 - 21 days when using highly retentive film

NOTE:

¹ For fields infested with Nutsedge and Malva, apply a minimum of 300 lbs/acre (18.9 gal/acre) of MIDAS 50:50 with standard tarp and 160 lbs/acre (10.1 gal/acre) with highly retentive film.

² Use the longer planting restriction period under conditions of high soil moisture, heavy soils, or rain.

³ Contact your Arysta LifeScience representative for film selection and rate reduction recommendations and approved films.

Field Rate Modifier Table for Raised Bed Applications

Row Spacing (inches)	Bed Width (inches)	Field Rate Modifier
72	40	0.55
72	36	0.50
72	32	0.44
72	30	0.42
72	28	0.39
66	32	0.48
66	30	0.45
66	28	0.42
66	24	0.36
60	30	0.50
60	28	0.47
48	28	0.58

APPLICATION RATES FOR BROADCAST/FLAT FUME FUMIGATION WITH STANDARD TARPS

Crop	MIDAS 50:50 Per Acre ¹	Time Between Application and Planting
Field-Grown Ornamentals Peppers Strawberries Tomatoes Turf	200 – 350 lbs/Acre (12.6 – 22 gal/Acre)	10 – 14 days
Stone Fruits (Apricot, Sweet Cherry, Tart Cherry, Nectarine, Peach, Plum, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot, Fresh Prune)	240 – 350 lbs/Acre (15.1 – 22 gal/Acre)	10 – 14 days

APPLICATION RATES FOR BROADCAST/FLAT FUME FUMIGATION WITH STANDARD TARPS

Crop	MIDAS 50:50 Per Acre ¹	Time Between Application and Planting
Tree Nuts (Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (Hazelnut), Hickory Nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Black Walnut, English Walnut)		
Vines (Table, Raisin and Wine Grapes)		
Nurseries (including strawberries, stone fruits, tree nuts and conifer trees)	350 lbs/Acre (22 gal/Acre)	10 – 14 days

NOTE:

¹ For fields infested with Nutsedge and Malva apply a minimum of 300 lbs/acre (18.9 gal/acre) of MIDAS 50:50.

Application Rates for Broadcast/Flat Fume Fumigation with Highly Retentive Tarps

Contact your Arysta LifeScience North America representative for information on tarp selection and rate reduction recommendations for highly retentive tarp. Applications using highly retentive film shall not exceed 200 lbs/Acre (12.6 gal/Acre).

Tree Replant Applications: For Stone Fruit Trees, Tree Nuts, Vines, and Field Grown Ornamental Trees and Shrubs, use 1 – 1.5 lbs of MIDAS 50:50 per injection site. Use 1 injection site per 100 square feet (ie, one injection site every 10 feet in a standard grid pattern). Planting or replanting of Stone Fruit Trees, Tree Nuts, Vines, and Field Grown Ornamental Trees and Shrubs may begin 14 days after treatment. DO NOT PLANT if the odor of chloropicrin is detectable.

Do not treat more than 230 trees/shrubs/vines per acre per day. This is equivalent to a maximum of 173 lbs ai per acre of iodomethane and 173 lbs ai per acre chloropicrin.

ROTATIONAL CROPS

There are no crop rotation restrictions.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store in a dry, cool, well-ventilated area under lock and key. When appropriate to prevent tipping, store cylinders upright, secured to a rack or wall. Post as a pesticide storage area.

Handling: Product cylinders shall not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging or sliding. Do not use rope slings, hooks, tongs, or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured.

Do not remove valve protection bonnet and safety cap until immediately before use. When cylinder is not in use, close valve by turning clockwise until hand tight, screw safety cap onto valve outlet, and replace protection bonnet.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use

according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Return of Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. This pesticide container, whether full or partially used, is the property of the manufacturer or distributor where it was purchased and must be returned to the distributor of origin. Do not ship containers without safety caps or valve protection bonnets. Containers shall never be refilled by the consumer.

FOR 24-HOUR CHEMICAL EMERGENCY (spill, leak, fire or accident) ASSISTANCE:
Call CHEMTREC at 1-800-424-9300

Comment [JB1]: The highlighted text from PR Notice 2007-4 Notification is currently Pending at the Agency. Residue removal language was not included because it does not apply to pressurized fumigants as outlined in the Final Revised EPA Ruling Published in the Federal Register on Oct 29th, 2008 amending pesticide container and containment regulations.

Warranty and Disclaimer Statement

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America, LLC ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions. This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF ARYSTA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF ARYSTA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT ARYSTA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.

MIDAS® and the Midas logo are registered trademarks of Arysta LifeScience North America, LLC
Arysta LifeScience and the Arysta LifeScience logo are registered trademarks of Arysta LifeScience, LLC



EPA

Environmental Protection Agency

Washington, DC 20460

☒ **Amendment**☐ **Other:**

OPP Identifier Number

Florida Only
Approved OMB No. 2070-0047

1. Company/Product Number 66330-59	2. EPA Product Manager Mary L. Waller	3. Proposed Classification <input type="checkbox"/> None <input checked="" type="checkbox"/> Restricted
4. Company/Product (Name) Midas 33:67	PM# 21	
5. Name and Address of Applicant (Include ZIP Code) Arysta LifeScience North America, LLC 15401 Weston Parkway, Suite 150 Cary, NC 27513 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(I), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

<input checked="" type="checkbox"/> Amendment – Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application
<input type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below

Label amendment in accordance with the 2009 amended RED for chloropicrin.

This is a non-PRIA action and no fee is required.


1. Material This Product Will Be Packaged In:

Child-Resistant Packaging <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No		Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		2. Type of Container <input checked="" type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify)	
*Certification must be submitted		If "Yes" Unit Packaging wgt. No. per container		If "Yes" Package wgt. No. per container			
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container				5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On labeling accompanying product	
6. Manner in Which Label is Affixed to Product		<input type="checkbox"/> Lithograph <input type="checkbox"/> Other _____ <input checked="" type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled					

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application)

Name	W. A. Hawkins, Jr., Ph.D.	Title	Regulatory Manager	Telephone No. (Include Area Code)	919-678-4886
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I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

2. Signature 	3. Title Regulatory Manager
4. Typed Name W. A. Hawkins, Jr., Ph.D.	5. Date 11/19/09



Arysta LifeScience

November 19, 2009

Document Processing Desk
Andrea Carone, SRRD (AMEND)
Office of Pesticide Programs (7508P)
U. S. Environmental Protection Agency
Room S-9626, One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202-4501

Dear Ms. Carone:

**SUBJECT: Label Amendment to Comply with RED for Chloropicrin
MIDAS 33:67 (EPA Reg. No. 66330-59)**

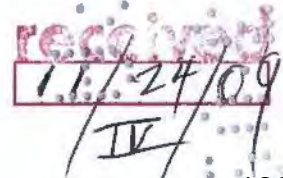
Enclosed are five copies each of two amended labels for MIDAS 33:67 (EPA Reg. No. 66330-59) and a copy of EPA Form 8570-1. The amended labels include all of the new language necessary to comply with the first phase of label changes required by the RED, as well as some changes in existing text to avoid conflicts with the new language. There are four clean copies of each label enclosed and one copy that has been marked up to show the changes. Deleted text is designated by ~~strike through~~ and new text is underlined.

In the section entitled Mandatory Good Agricultural Practices (GAPs) for Bedded and Broadcast Shank Applications, we have reduced the minimum pressure to be used when applying MIDAS 33:67 from 200 psi to 100 psi for product sold in conventional steel cylinders (Calibration, Set-Up, Repair and Maintenance) based on our experiences with typical application practices and extensive monitoring of MIDAS product applications in the field. Applicators are typically using between 80 psi and 140 psi and applying the product safely and efficaciously at these pressures, and there is less likelihood of ruptures in delivery lines at lower pressures. We have further reduced operating pressure to 35-40 psi when using product in the HDPE drum-in-drum poly-totes that are currently in development. These containers cannot handle higher pressures, and they have built-in anti-backflow valves.

If you should have any questions or require additional information, please don't hesitate to contact me by telephone at (919) 678-4886 or by e-mail at alex.hawkins@arystalifescience.com.

Sincerely,

W. A. Hawkins, Jr., Ph.D.
Regulatory Manager



**RESTRICTED USE PESTICIDE
DUE TO ACUTE TOXICITY**

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

MIDAS® 33:67

FOR SALE AND USE IN FLORIDA ONLY

Only For Pre-Plant Fumigations of Fields Intended for Commercial Production of Listed Crops and Field-Grown Ornamentals, for the Control of Soil-Borne Pests Including Weed Seeds, Nematodes, Insects, and Diseases.

ACTIVE INGREDIENTS:

Iodomethane	32.93%
Chloropicrin	66.67%
OTHER INGREDIENTS:	0.40%
TOTAL:	100.00%

One gallon weighs 15.1 pounds (5 pounds Iodomethane and 10.1 pounds Chloropicrin).

**KEEP OUT OF REACH OF CHILDREN
DANGER / PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail).

FIRST AID

If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person.

HOT LINE NUMBERS

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL:
1-866-303-6952 or 1-651-632-8946

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage. Symptoms of overexposure may include irritation to eyes, skin, and respiratory system, shortness of breath, nausea, vomiting, dizziness, ataxia, slurred speech, drowsiness, blurred vision, staggering gait and mental imbalance, with probable recovery after period of no exposure. Treatment is symptomatic.

EPA Reg. No. 66330-59
EPA Est. No.

For Product Information Call: 1-866-761-9397

Net Contents: _____ LBS.

Manufactured for
Arysta LifeScience North America, LLC
15401 Weston Parkway, Suite 150
Cary, NC 27513

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

Danger. Corrosive. Causes irreversible eye damage. Corrosive to skin. Causes skin burns. May be fatal if inhaled or swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin or on clothing. Do not breathe vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Certain activities are prohibited from being performed in the application block (ie, the field or portion of a field treated with a fumigant in any 24-hour period) or surrounding buffer zone during the buffer zone period by anyone other than persons who have been appropriately trained and equipped as handlers in accordance with the requirements in the Worker Protection Standard (40 CFR Part 170), from the start of the application until the entry restricted period ends. Those activities are listed in the following PPE section.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers (to include supervisors, tractor drivers, co-pilots, shovelers, cross ditchers, and tarp monitors) present on the application site or within the buffer zone (see exception for transient travel under heading "Buffer Zone") **must wear:**

- Loose fitting or well ventilated long-sleeved shirt and long pants. Shoes plus socks.
- Full-face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles.
- A half-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C).
- To determine whether a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent, is required or if operations must cease for any person performing a handling task as stated on this label, see the **Respiratory Protection and Stop Work Triggers** section below.

Other handlers (to include planters, hole punchers, tarp cutters, tarp removers, tarp remover drivers and persons involved with tarp and irrigation repair, air monitoring, scouting/crop advising) present on the application block from the start of the application until 14 days following the end of the application for unperforated tarps that are removed during those 14 days; or until tarp removal is complete if tarps are **both perforated and** removed less than 14 days after application; or until 48 hours after tarp perforation is completed if the tarps will not be removed within 14 days after application; and within the buffer zone from the start of the application until 48 hours following the end of the application (see exception for transient travel under heading "Buffer Zone") **must wear:**

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles.

- To determine whether a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent, is required or if operations must cease for any person performing a handling task as stated on this label, see the **Respiratory Protection and Stop Work Triggers** section below.

NOTE: See **Tarp Perforation and Removal** section for perforation requirements.

Applicators and other handlers when handling liquid (to include supervisors, loaders, tractor drivers, and persons involved with spill recovery, container disposal, and equipment repair) present on the application site and within the buffer zone (see exception for transient travel under heading "Buffer Zone") **must wear:**

- Loose fitting or well ventilated long-sleeved shirt and long pants
- Chemical-resistant gloves; apron, footwear; and socks. Some materials that are chemical-resistant to this product are barrier laminate or viton ≥ 14 mils. For more options, follow the instructions for category H on an EPA chemical-resistance category selection chart.
- Full-face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles.
- A half-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C).
- To determine whether a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent, is required or if operations must cease for any person performing a handling task as stated on this label, see the Respiratory Protection and Stop Work Triggers section below.

Respiratory Protection and Stop Work Triggers

The following procedures must be followed to determine whether a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent, is required or if operations must cease for any person performing a handling task as stated in this label.

- If at any time any handler experiences sensory irritation (tearing, burning of the eyes or nose) then either:
 - A full-face air-purifying respirator must be worn by all handlers who remain in the application block and surrounding buffer zone, or
 - Operations must cease and handlers not wearing full-face air-purifying respirators must leave the application block and surrounding buffer zone.
- Handlers can remove full-face air-purifying respirators or resume operations if two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show that levels of chloropicrin have decreased to less than 0.15 ppm, provided that handlers do not experience sensory irritation. Samples must be taken where the irritation is first experienced.
- When using monitoring devices to monitor air concentration levels, a direct reading detection device, such as a Matheson-Kitagawa, Dräger, or Sensidyne device must be used. The devices must have a sensitivity of at least 0.15 ppm for chloropicrin.
- When full-face air-purifying respirators are worn, then air monitoring samples must be collected at least every 2 hours in the breathing zone of a handler performing a representative handling task.
- If at any time: (1) a handler experiences any sensory irritation when wearing a full-face air-purifying respirator, or (2) an air sample is greater than or equal to 1.5 ppm chloropicrin, then all handler activities must cease and handlers must be removed from the application block and surrounding buffer zone. If operations cease the emergency plan detailed in the FMP must be implemented.
- Handlers can resume work activities without full-face air-purifying respirators, if two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show levels of chloropicrin have decreased to less than 0.15 ppm, provided that handlers do not experience sensory irritation. During the collection of air samples a full-face air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the irritation is first experienced.

- During the collection of air samples a full-face air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the irritation is first experienced.
- Work activities can resume if the following conditions exist provided that a full-face air-purifying respirator is worn:
 - Two consecutive breathing zone samples for chloropicrin taken at the handling site at least 15 minutes apart must be less than 1.5 ppm but are greater than 0.15 ppm,
 - Handlers do not experience sensory irritation while wearing the full-face air-purifying respirator, and
 - Cartridges have been changed.

IMPORTANT: an air-supplying respirator [ie, a respirator connected directly to a clean air source or a self-contained breathing apparatus (SCBA)] is not permitted for routine handler tasks. Such respirators are only permitted in emergencies such as spill or leak or when corrective action is needed to reduce air levels to acceptable levels.

ENGINEERING CONTROL REQUIREMENTS

MIDAS 33:67 must be transferred through connecting hoses, pipes, and/or couplings sufficiently tight to prevent workers or other persons from coming in contact with the liquid.

- All hoses, piping, and tanks used in connection with this product shall be of a type appropriate for use under the pressure and vacuum conditions to be encountered.
- Hoses between any fumigant container and the flow divider must be Teflon® hoses reinforced with stainless steel wire braid or its equivalent.
- External sight gauges, if applicable, shall be equipped with valves so that pipes to sight gauge can be shut off in case of breakage or leakage.
- The mechanical transfer system must be adequate to make necessary measurements of the pesticide being used.
- Shut-off devices must be installed on the exit end of all cylinder connections and at all disconnect points to prevent leakage of product when the transfer is stopped and hose is removed or disconnected.
- The pressure in hoses used to move the product must not exceed the manufacturer's maximum pressure specifications.
- Check equipment to ensure good condition and integrity prior to each use.

User Safety Requirements

- Do not wear jewelry, gloves, goggles (except where otherwise required by this label), tight clothing or any rubber protective clothing/boots that can trap iodomethane or chloropicrin vapors against your skin. Iodomethane and chloropicrin vapors can be trapped inside clothing and cause skin injury.
- Remove all clothing that comes in contact with liquid fumigant at once.
- Aerate all affected clothing thoroughly outdoor prior to washing with hot water and detergent.
- Discard clothing or absorbent materials, that have been drenched or heavily contaminated with this product. Do not reuse them.
- Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.
- Respirator Requirements: When a respirator is required for use with this product:
 - (a) Cartridges or canisters must be replaced when odor or irritation from this product becomes apparent, if the measured concentration of chloropicrin is greater than or equal to 1.5 ppm, or after 8 hours of use, or after 8 hours of use, whichever occurs first;
 - (b) Employers must ensure that any handler who uses a respirator is:
 - Fit-tested, fit-checked, and trained using a program that conforms to OSHA's requirements (described in 29 CFR Part 1910.134);
 - Examined by a qualified medical practitioner to ensure physical ability to safely wear the style of respirator to be worn. A qualified medical practitioner is a physician or other licensed health care

professional who will evaluate the ability of a worker to wear a respirator. The initial evaluation consists of a questionnaire that asks about medical conditions (such as a heart condition) that would be problematic for respirator use. If concerns are identified, then additional evaluations, such as a physical exam, might be necessary. The initial evaluation must be done before respirator use begins. Handlers must be reexamined by a qualified medical practitioner if their health status or respirator style or use-conditions change.

USER SAFETY RECOMMENDATIONS

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing and gloves immediately if pesticide gets inside, then wash skin thoroughly and put on clean clothing and gloves.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to mammals and birds. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate. Iodomethane and chloropicrin have certain properties and characteristics in common with chemicals that have been detected in ground water (iodomethane and chloropicrin are highly soluble in water and have low adsorption to soil).

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat, open flames, or sparking electrical equipment. Do not use application devices containing natural rubber, aluminum, magnesium or their alloys.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift.

PROTECTION FOR HANDLERS

Only Certified Applicators (certified by the state and trained by Arysta) in the proper handling, worker protection, and application of MIDAS 33:67 soil fumigant and protected handlers under their direct supervision may be present in the treatment area during application. From the start of the application until the fumigant has stopped being delivered/dispensed into the soil, ie, after the soil is sealed, an Arysta trained and state Certified Applicator must be at the fumigation site and within the line of sight to directly supervise handlers during the application. The results of monitoring activities must be captured in the Fumigant Management Plan (FMP) post-application summary.

For handling activities that take place after the fumigant has been delivered/dispensed into the soil until the entry restricted period expires, the Certified Applicator does not have to be on-site, but must have communicated, in a manner that can be understood, to the site owner/operator and handlers responsible for carrying out those activities the information necessary to comply with the label and procedures described in the FMP. Communication activities must be captured in the FMP.

IMPORTANT: This requirement does not override the requirements in the Worker Protection Standard for Agricultural Pesticides for information exchange between owners/operators of agricultural establishments and commercial pesticide applicators.

The Certified Applicator must provide fumigant safe handling information to each handler involved in the application or confirm that each handler participating in the application has received fumigant safe handling information in the past 12 months.

For all handling tasks at least two handlers trained under the provisions of the WPS 40 CFR 170.230 must be present.

The employer of any handler must confirm that an air-purifying respirator and appropriate cartridges of the type specified in the PPE section of this labeling are immediately available for each handler who will wear one. This must be documented in the FMP.

The employer of any handler must confirm that at least one air-rescue device (eg, SCBA) is on-site and is ready for use in case of an emergency. This must be documented in the FMP.

Exclusion Of Non-Handlers From Application Block:

The Certified Applicator supervising the application and the owner/operator of the establishment where the fumigation is taking place must make sure that all persons who are not trained and PPE-equipped and who are not performing one of the handling tasks as stated in this labeling are excluded from the application block during the entry restricted period.

For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Buffer Zone

The area adjacent to the treated area is referred to as the buffer zone. The buffer zone shall extend from the edge of the treated area in all directions. See Buffer Zone Table. The minimum buffer zone distance shall be 25 feet.

The Certified Applicator supervising the soil fumigation is responsible for the following:

1. Calculating the appropriate size of the buffer zone that must be maintained from the start of the application until 48 hours following the end of the application;
2. Establishing and maintaining the buffer zone from the start of the application until 48 hours following the end of the application. Buffer zones must be on the property under the control of the Certified Applicator and must not include property that is not under the control of the Certified Applicator unless written permission is obtained prior to fumigation, including signature, from responsible parties from all properties that will be included or partially included in the buffer zone. Buffer zones shall not extend onto public roads or areas, or onto any other land for which written consent is not attainable. The Certified Applicator must use an appropriate means to manage and maintain the buffer zone such as posting fumigant warning signs around the perimeter of the buffer zone at potential points of entry, using trained workers to patrol the buffer zone, or other equivalent means. If fumigant warning signs are used, they must be posted from the start of the application until 48 hours following the end of the application and they must include the same warning symbol and statements required for Fumigant Treated Area signs under AGRICULTURAL USE REQUIREMENTS with the exception that signs will indicate "Fumigant Buffer Zone" at the top of the sign and will delete the statement "areas under fumigation". If "Fumigant Buffer Zone" signs are used, the signs must be removed within 3 days of the end of the buffer zone period.
3. Ensuring that unprotected workers and bystanders do not enter the buffer zone from the start of the application until 48 hours following the end of the application. **Exception:** Unprotected workers and bystanders may travel through (but not engage in any activity in) the buffer zone during the application and the 48-hour period following the end of the application, provided their total exposure time in any 24-hour period is 15 minutes or less. However, travel by unprotected workers or bystanders through the fumigated area itself is prohibited during the entire 5-day Entry Restricted period. Handlers protected with required Personal Protective Equipment (PPE) may work in buffer zones. See the PERSONAL PROTECTIVE EQUIPMENT section.

4. Ensuring application site has a distinctive buffer zone. The buffer zone of the field to be treated cannot overlap the buffer zone of another field treated within the last 48 hours.
5. Ensuring that there are no occupied nursing homes, hospitals, or prisons; and no occupied licensed schools, licensed day care facilities and licensed assisted living facilities (licensed by state or local governments) within ¼ mile of the fumigated area during the buffer zone period.
6. Documenting how the buffer zone was determined, and providing the information specified below concerning occupied structures within the buffer zone; and nursing homes, hospitals, or prisons; or licensed schools, licensed day care facilities, or licensed assisted living facilities (licensed by state or local governments) within ¼ mile of the fumigated area. Records must include buffer zone calculations; diagrams; maps; and the dates and times people left occupied structures within the buffer zone; and when they were allowed to return to such structures. Records must include any consent documentation signed by parties whose properties were outside the control of the Certified Applicator but were included in the buffer zone. Records must also identify nursing homes, hospitals, or prisons; or licensed schools, licensed day care facilities, or licensed assisted living facilities (licensed by state or local governments) within ¼ mile of the fumigation area, and document how it was determined that such sites would be unoccupied during the application period. These records must be maintained by the Certified Applicator and by the owner/operator of the fumigated site for at least two years following the fumigation and must be made available, upon request to Federal, State, Tribal, and local enforcement personnel.

Determining Buffer Zone Distance

- Determine the size of the buffer zone using the following Buffer Zone Table.
- The size of the buffer zone will be dependent on the following three factors:
 - The number of field acres that are being treated with MIDAS 33:67.
 - The pounds of MIDAS 33:67 that are being applied per treated acre.
 - Buffer zone reduction credits.

Buffer Zone Table

MIDAS 33:67 Application Rate (Lbs per Treated Acre) ⁴	SIZE OF FIELD IN ACRES (Buffer zone distance in feet) ^{1,2}							
	Up to 5 Acres	6 – 10 Acres	11-15 Acres	16- 20 Acres	21-25 Acres	26-30 Acres	31-35 Acres	36-40 ³ Acres
100	25	25	45	60	70	80	90	95
150	25	30	60	85	100	115	130	145
175	25	35	70	100	120	135	150	165
200	25	40	80	115	135	155	175	190
250	25	50	95	140	165	190	215	235
300	30	60	115	170	200	230	260	285
350	35	70	135	200	235	265	300	330
360	35	70	140	205	240	275	310	340
400	40	75	150	225	265	305	345	380
500	50	95	190	285	335	380	430	475
520	50	100	200	300	350	400	450	500

1. For rates not listed on this table, use the buffer zone for the next highest rate, or use the following calculation to determine the exact buffer zone:

$$\text{Buffer Zone for Application Rate Not Listed} = \frac{\text{Known Buffer Zone on Table} \times \text{Application Rate Not Listed}}{\text{Rate of Application for Known Buffer Zone}}$$

2. Buffer Zone Reduction Credits:

Reduce buffer zone by 10% for each factor listed below:

- Use of flat fume / broadcast application
- Use of highly retentive films. Highly retentive films for which credit can be applied must be on an Arysta approved list. Examples of Arysta approved films are Canslit Brand Metalized 1.3 ml, Pliant Blockade® VIF 1.25 ml, or Pliant Metalized 1.0-1.25.
- Application to soils having >3% organic matter Refer to the USDA or USGS Soil Survey Maps for

the treated area that identify the range of organic matter and / or a documented soil survey report that lists range of % organic matter for the treated area. Collection of samples for analysis of soil in the treated area should follow procedures as per USDA's Natural Resource Conservation Services methods. Information on soil sampling can be found at www.soil.usda.gov.

For example, if the Buffer Zone is 50 feet and the application qualifies for a buffer zone reduction credit such as use of highly retentive film, then the buffer zone can be reduced by 10%, ie, reduced by 5 feet based on the following calculation: $50 \text{ ft} - (50 \text{ ft} \times 10\%) = 45 \text{ feet}$.

If the application qualifies for two buffer zone reduction credits such as use of highly retentive film and soil with >3% organic matter, then the buffer zone can be reduced by 20%, ie, reduced by 10 feet based on the following calculation: $50 \text{ ft} - (50 \text{ ft} \times 20\%) = 40 \text{ feet}$.

3. Applications are limited to 40 contiguous acres or less per day.
4. For raised bed applications, the treated area is the raised bed not the untreated furrows. As an example, if a raised bed field is 50% raised bed (treated) and 50% furrow (untreated), and 350 lbs of MIDAS 33:67 is applied to the raised beds of the field, then the effective application rate to the treated raised bed is 350 lbs per treated acre; and that is the rate that would determine the buffer zone.

Note: Minimum allowable buffer zone is 25 feet regardless of buffer zone reduction credits.

Buffer Zone for Pre-Plant Deep Injection Auger

- 25 feet if the application rate is less than 150 lbs MIDAS 33:67 per acre.
- 50 feet if application rate is 150 to 379 lbs MIDAS 33:67 per acre, and
- 100 feet if the application rate is 380 to 520 lbs MIDAS 33:67 per acre.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), restricted entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

For the entry restricted period and notification requirements, see the **Entry Restricted Period and Notification** section below.

Entry Restricted Period

Entry (including early entry that would otherwise be permitted under the WPS) by any person, other than a correctly trained and PPE-equipped handler who is performing a handling task listed on this labeling, is **PROHIBITED** from the start of the application until:

- 5 days after application is complete if tarps are not perforated and removed for at least 14 days following application or;
- 48 hours after tarp perforation is complete if tarps will not be removed for at least 14 days following application, or
- Until tarp removal is complete if tarps are both perforated and removed less than 14 days after application.

NOTE: See **Tarp Perforation and/or Removal** section on this labeling for requirements about when tarps are allowed to be perforated.

Notification at Entrances To Treated Areas

Notify workers of the fumigation by warning them verbally and by posting Fumigant Treated Area signs. The Fumigant Treated Area signs must bear the skull and crossbones symbol and state:

- (1) "DANGER/PELIGRO"
- (2) "Areas under fumigation, DO NOT ENTER/NO ENTRE"
- (3) Iodomethane and Chloropicrin Fumigants in Use
- (4) Date and time of fumigation
- (5) Date and time entry restricted period is over
- (6) MIDAS 33:67
- (7) Name, address, and telephone number of the Certified Applicator in charge of the fumigation.

Post the Fumigant Treated Area signs instead of the WPS signs for this application but follow all WPS requirements pertaining to location, legibility, size and timing of posting and removal.

Post the Fumigant Treated Area signs at all entrances to the application block (i.e., the field portion of a field treated with a fumigant in any 24-hour period).

GENERAL INFORMATION AND INSTRUCTIONS

This fumigant is a highly hazardous material. All uses of this fumigant are covered under the Worker Protection Standard, and must be conducted in accordance with all of the requirements of the Worker Protection Standard (40 CFR Part 170). It is a restricted use pesticide that must only be used by Certified Applicators, certified by the state and trained by Arysta, in the proper handling, worker protection, and application of MIDAS 33:67 soil fumigant and handlers under their direct supervision. Before using, read the entire label and follow all use directions and precautions. All persons working with this fumigant must be knowledgeable about the hazards and trained in the use of required air-purifying respirator equipment and detector devices, emergency procedures and proper use of the fumigant.

GENERAL USE PRECAUTIONS

The maximum application rate for preplant soil uses is 175 lbs ai per acre of iodomethane and 350 lbs ai per acre of chloropicrin.

- Follow all local government instructions for posting of treated areas and post all treated areas with warning signs.
- Comply with all local ordinances and regulations.
- Do not apply within ¼ mile of nursing homes, hospitals or prisons; or licensed schools, licensed day care facilities or licensed assisted living facilities (licensed by state or local governments) that will be occupied during the buffer zone period.
- Applications are limited to 40 contiguous acres or less per day.
- Never fumigate alone. A minimum of two persons must be present during handling and application of soil fumigants. These persons must be Certified Applicators or handlers under the direct supervision and within the line of sight of a Certified Applicator.
- Additional instructions must be made available to handlers in the mechanical operation of the tractor and how to safely work with the operator while fumigating.
- Always handle this product in the open, with all handlers positioned "upwind" from the container and/or where there is adequate ventilation.
- Check the fumigation system for leaks or worn out equipment prior to soil injection.
- When fumigating from a tractor, it is required that 5 gallons of water be carried on the tractor and readily available for rinsing and cleaning purposes. An additional 5 gallons of water must be available

in the service truck. This water must be potable and in containers marked "Decontamination water not to be used for drinking."

- For broadcast/flat fume applications, keep all pets, livestock and other domestic animals out of the treated areas until tarps have been removed.
- For raised bed applications, keep all pets, livestock and other domestic animals out of the treated areas for 5 days. Most raised bed applications will not result in tarp removal.
- See AGRICULTURAL USE REQUIREMENTS box for details regarding posting and placement of Fumigant Treated Area signs.

SPILL AND LEAK PROCEDURES

- Refer to the Personal Protective Equipment section for Applicators and other handlers when handling liquid from spills and leaks.
- Cease all operations if any leak develops in the fumigation system.
- Evacuate everyone from the immediate areas of the spill or leak.
- Approach the area from the upwind side. Work upwind to repair leak(s), if possible.
- Allow spilled fumigant to evaporate or to absorb onto vermiculite, dry sand, earth, or similar absorbent material. Such material should be disposed of on site or at an approved disposal facility.
- Contaminated soil, water and other cleanup debris may be hazardous waste. Report any spill that exceeds 302 lbs (20 gallons of product) to the National Response Center at 1-800-424-8802.

SITE-SPECIFIC FUMIGATION MANAGEMENT PLAN (FMP)

Prior to the start of fumigation, the Certified Applicator supervising the application must verify that a site-specific FMP exists for each application block (ie, a field or portion of a field treated with a fumigant in any 24-hour period). In addition, an agricultural operation fumigating multiple application blocks may format the FMP in a manner whereby all of the information that is common to all the application blocks is captured once, and any information unique to a particular application block or blocks is captured in subsequent sections.

The FMP must be prepared by the Certified Applicator, the site owner/operator, registrant or other party.

The Certified Applicator must verify in writing (sign and date) that the site-specific FMP(s) reflects current site conditions before the start of fumigation.

Each site-specific FMP must contain the following elements:

- Applicator information (name, phone number, pesticide applicator license number, employer name, employer address)
- General site information
 - Application block location (eg, county, township-range-section quadrant), address, or global positioning system (GPS) coordinates
 - Name, address, and phone number of owner/operator of the application block
- General application information (target application date/window, brand name of fumigant, EPA registration number)
- Tarp information and procedures for repair, perforation, and removal (if tarp is used)
 - Brand name, lot number, thickness
 - Name and phone number of person responsible for repairing tarps
 - Schedule for checking tarps for damage, tears, and other problems
 - Maximum time following notification of damage that the person(s) responsible for tarp repair will respond
 - Minimum time following application that tarp will be repaired
 - Minimum size of damage that will be repaired
 - Other factors used to determine when tarp repair will be conducted
 - Name and phone number of person responsible for perforating and/or removing tarps (if other than Certified Applicator)
 - Equipment/methods used to perforate tarps

- Schedule and target dates for perforating tarps
- Schedule and target dates for removing tarps
- Soil conditions (description of soil texture in application block, method used to determine soil moisture)
- Weather conditions (summary of forecasted conditions for the day of the application and the 48-hour period following the fumigant application)
 - Wind speed
 - Inversion conditions (eg, shallow, compressed (low-level) temperature inversion)
 - Air stagnation advisory
- Air-purifying respirators, air-rescue devices, and other personal protective equipment (PPE) for handlers (handler task, protective clothing, air-purifying respirator type, respirator cartridge type, respirator cartridge replacement schedule, air-rescue device type, eye protection, gloves, other PPE)
- Emergency procedures (evacuation routes, locations of telephones, contact information for first responders, local/state/federal/tribal contacts, key personnel and emergency procedures/responsibilities in case of an incident, equipment/tarp/seal failure or complaints, or other emergencies).
- Fumigant Treated Area posting procedures (person(s) who will post Fumigant Treated Area signs, location of Fumigant Treated Area signs, procedures for Fumigant Treated Area sign removal)
- Plan describing how communication will take place between the applicator, land owner/operator, and other on-site handlers (eg, tarp perforators/removers, irrigators) for complying with label requirements (eg, timing of tarp perforation and removal, PPE).
 - Name and phone number of persons contacted
 - Date contacted
- Authorized on-site personnel
 - Names, addresses and phone numbers of handlers
 - Names, addresses and phone numbers for employees of handlers
 - Tasks that each handler is authorized and trained to perform
 - For handlers designated to wear air-purifying respirators (an air-purifying respirator is required for a minimum of 2 handlers):
 - date of medical qualification to wear an air-purifying respirator
 - date of air-purifying respirator training, and
 - date of fit-testing for the air-purifying respirator.
- Air monitoring plan
 - If sensory irritation is experienced, indicate whether operations will be ceased or operations will continue with an air-purifying respirator
 - If the intention is to cease operations when sensory irritation is experienced, provide the name, address, and phone number of the handler that will perform monitoring activities prior to operations resuming
 - When air-purifying respirators are worn:
 - Representative handler tasks to be monitored
 - Monitoring equipment to be used and timing of monitoring
- Good Agricultural Practices (GAPs)
 - Description of applicable mandatory GAPs (registrants may also include optional GAPs)
 - Measurements and documentation to ensure GAPs are achieved (eg, measurement of soil and other site conditions)
- Description of hazard communication. (The application block has been posted in accordance with the label. Pesticide product labels and material safety data sheets are on-site and readily available for employees to review.)
- Record-keeping procedures (the owner/operator of the application block as well as the Certified Applicator must keep a signed copy of the site-specific FMP for 2 years from the date of application).

For situations where an initial FMP is developed and certain elements do not change for multiple fumigation sites (eg, applicator information, authorized on-site personnel, record-keeping procedures, emergency procedures) only elements that have changed need to be updated, in the site-specific FMP provided the following:

- The Certified Applicator supervising the application has verified that those elements are current and applicable to the application block before it is fumigated.
- Record-keeping requirements are followed for the entire FMP (including elements that do not change).

Once the application begins, the Certified Applicator must make a copy of the FMP available for viewing by handlers involved in the fumigation. The Certified Applicator or the owner operator of the application block must provide a copy of the FMP to any local/state/federal/tribal enforcement personnel who request the FMP. In the case of an emergency, the FMP must be made immediately available when requested by local/state/federal/tribal emergency response and enforcement personnel.

Within 30 days of completing the application portion of the fumigation process, the Certified Applicator supervising the application must complete a post-application summary that describes any deviations from the FMP that have occurred, measurements taken to comply with GAPs, monitoring results as well as any complaints and/or incidents that have been reported to him/her.

The Post-Application Summary must contain the following elements:

- Actual date of the application, application rate, and size of application block fumigated
- Summary of weather conditions on the day of the application and during the 48-hour period following the fumigant application
- Soil temperature measurement (if air temperatures were above 100 degrees F in any of the 3 days prior to the application)
- Tarp damage and repair information (if applicable)
 - Location and size of tarp damage
 - Description of tarp/tarp seal/tarp equipment failure
 - Date and time of tarp repair
- Tarp perforation/removal details (if applicable)
 - Description of tarp removal (if different than in the FMP)
 - Date tarps were perforated
 - Date tarps were removed
- Complaint details (if applicable)
 - Person filing complaint (eg, on-site handler, person off-site)
 - If off-site person, name, address, and phone number of person filing complaint
 - Description of control measures or emergency procedures followed after complaint.
- Description of incidents, equipment failure, or other emergency procedures followed (if applicable)
- Details of elevated air concentrations monitored on-site (if applicable)
 - Location of elevated air concentration levels
 - Description of control measures or emergency procedures followed
 - Air monitoring results
 - When sensory irritation experienced:
 - Date and time of sensory irritation
 - Handler task/activity
 - Handler location where irritation was observed
 - Resulting action (eg, cease operations, continue operations with air-purifying respirators)
 - When using a direct read instrument:
 - Sample date and time
 - Handler task/activity
 - Handler location
 - Air concentration
 - Sampling method
- Date of Fumigant Treated Area sign removal
- Any deviations from the FMP
- Record-keeping procedures (the owner/operator of the application block as well as the Certified Applicator must keep a signed copy of the post-application summary for 2 years from the date of application).

PROCEDURES PRIOR TO, DURING AND AFTER ALL APPLICATIONS

CONTROL OF SOIL BORNE PESTS: MIDAS 33:67 controls soil-borne pests including nematodes, insects, weed seeds, and diseases.

Midas 33:67 will control the following pests when present in soil at the time of treatment:

Weed Seeds, including broadleaf weeds such as nutsedge, pigweed, broomrape and lambsquarters, and grasses such as bermudagrass, and annual bluegrass. Effectiveness against hard seed weeds, such as mallow, dodder, morning glory, and certain leguminous weeds may be variable.

Plant-parasitic Nematodes, such as root-knot, root lesion (meadow), cyst, citrus, burrowing, false root-knot, lance, spiral, ring, sting, stubby root, dagger, awl, sheath and sting (stylet) nematodes.

Soil-borne Insects, such as wireworms, cutworms, grubs, rootworms, ants and garden symphylans.

Soil-borne Diseases, such as *Verticillium*, *Pythium*, *Rhizoctonia*, *Phytophthora*, and *Fusarium*.

MIDAS 33:67 is not to be used as a preventative treatment for pests that may be introduced after the fumigant has been applied and/or tarps removed. To reduce the potential for the re-introduction of pests (nematodes, weed seed and disease); avoid the use of irrigation water, transplants or equipment that could carry pests into the planting area. Avoid moving infested soil back into the treated area through cultivation or other means.

Mandatory Good Agricultural Practices (GAPs)

The following GAPs must be followed during all fumigant applications. All measurements and other documentation planned to ensure that the mandatory GAPs are achieved must be recorded in the FMP and/or post-application summary.

Tarp Plan

A written tarp plan must be developed and included in the FMP. The plan must include:

- schedule and procedures for checking tarps for damage, tears, and other problems
- plans for determining when and how repairs to tarps will be made, and by whom
- minimum time following injection that tarp will be repaired
- minimum size of tarp damage that will be repaired
- other factors used to determine how and when tarp repair will be conducted
- schedule, equipment, and methods used to perforate tarps
- aeration plans and procedures following perforation of tarp, but prior to tarp removal or planting/transplanting
- schedule, equipment, and procedures for tarp removal

Weather Conditions

- Prior to fumigation the weather forecast for the day of the application and the 48-hour period following the fumigation must be checked to determine if unfavorable weather conditions exist (see ***Identifying Unfavorable Weather Conditions*** section) or are predicted and whether fumigation should begin.
- Wind speed at the application site must be a minimum of 2 mph at the start of the application or forecasted to reach at least 5 mph during the application.
- Do not apply if a shallow, compressed (low-level) temperature inversion is forecast to persist for more than 18 consecutive hours for the 48-hour period after the start of application, or if there is an air stagnation advisory issued by the National Weather Service in effect for the area in which the fumigation is planned.

- Detailed local forecasts for weather conditions, wind speed, and air stagnation advisories may be obtained on-line at: <http://www.nws.noaa.gov> For further guidance, contact your local National Weather Service Forecasting Office.
- **Identifying Unfavorable Weather Conditions** - Unfavorable weather conditions block upward movement of air, which results in trapping fumigant vapors near the ground. The resulting air mass can move off-site in unpredictable directions. These conditions typically exist prior to sunset and continue past sunrise and persist as late as noontime. Unfavorable conditions are common on nights with limited cloud cover and light to no wind and their presence can be indicated by ground fog or smog and can also be identified by smoke from a ground source that flattens out below a ceiling layer and moves laterally in a concentrated cloud.

Soil Preparation

- Soil must be properly prepared and at the surface generally be free of clods that are golf ball size or larger. The area to be fumigated must be tilled to a depth of at least 5 to 8 inches.
- Field trash must be properly managed. Residue from a previous crop must be worked into the soil to allow for decomposition prior to fumigation. Little or no crop residue shall be present on the soil surface. Crop residue that is present must not interfere with the soil seal. Removing the crop residue prior to fumigation is important to limit the natural "chimneys" that occur in the soil when crop residue is present. These "chimneys" allow the soil fumigants to move through the soil quickly and escape into the atmosphere. This may create potentially harmful conditions for workers and bystanders and limit the efficacy of the fumigant. However, crop residue on the field serves to prevent soil erosion from both wind and water and is an important consideration. To accommodate erosion control, fumigant efficacy, and human health protection, clear fields of crop residue as close to the timing of the fumigation as possible to limit the length of time that the soil would be exposed to potentially erosive weather conditions.

Soil Sealing

- **For Bedded Applications:** Preformed beds must be sealed by disruption of the chisel trace using press sealers, bed shapers, cultipackers, or by re-shaping (eg, relisting, lifting, replacing) the beds immediately following injection. Beds formed at the time of application must be sealed by disrupting the chisel trace using press sealers, or bed shapers.
- **For Broadcast Tarped Applications:** The use of a tarp does not eliminate the need to minimize chisel traces prior to application of the tarp, such as by using a Nobel plow or other injection shank that disrupts the chisel traces.

Prior to All Applications:

- Ensure that application equipment does not contain components made of natural rubber, aluminum, magnesium or their alloys.
- The soil must be sufficiently moist to allow seeds to swell (imbibe) in preparation for germination.

During All Applications:

- Except for deep injection auger-probe applications, immediately cover treated areas with a plastic tarp.
- Do not change cylinders when the fumigant system is under pressure. Change cylinders with all cylinder valves in the off position.

Following All Applications:

- To minimize the potential for crop injury, allow the fumigant to dissipate before planting a crop. Seeds may be used as a bioassay to determine if MIDAS 33:67 is present in the soil at concentrations sufficient to cause plant injury. See fumigation tables for planting requirements specific to the different application methods.
- Fumigation of highly acidic soils or those high in organic matter can cause ammonia toxicity to plants and or elevated levels of soluble salts in the soil causing phytotoxicity. Analyze soil following fumigation and fertilize as indicated. Avoid those fertilizers using ammonium salts.

Tarp Perforation and/or Removal

IMPORTANT: Persons perforating, repairing, removing, and/or monitoring tarps are defined, within certain time limitations, as handlers (see Personal Protective Equipment section) and must be provided the PPE and other protections for handlers as required on this labeling and in the Worker Protection Standard for Agricultural Pesticides.

- Tarps must not be perforated until a minimum of 5 days have elapsed after the fumigant injection into the soil is complete (eg, after injection of the fumigant and tarps have been laid), unless a weather condition exists which necessitates the need for early perforation or removal, see ***Early Tarp Removal for Broadcast Applications Only*** and ***Early Tarp Perforation for Flood Prevention Activities*** sections. In the case of applications using highly retentive films, tarps must not be perforated until 10 days have elapsed after the fumigant injection.
- If tarps will be removed before planting, tarp removal must not begin until at least 2 hours after tarp perforation is complete.
- If tarps will not be removed before planting, planting or transplanting must not begin until at least 48 hours after the tarp perforation is complete.
- If tarps are left intact for a minimum of 14 days after fumigant injection into the soil is complete, planting or transplanting may take place while the tarps are being perforated.
- Each tarp panel used for broadcast fumigation must be perforated.
- Tarps used for fumigations may be perforated manually **ONLY** for the following situations:
 - At the beginning of each row when a coulter blade (or other device which performs similarly) is used on a motorized vehicle such as an ATV.
 - In fields that are 1 acre or less.
 - During flood prevention activities.
- In all other instances tarps must be perforated (cut, punched, poked, or sliced) only by mechanical methods.
- Tarp perforation for broadcast fumigations must be completed before noon.
- For broadcast fumigations, tarps must not be perforated if rainfall is expected within 12 hours.
- **Early Tarp Removal for Broadcast Applications Only:**
 - Tarps may be removed before the required 5 days if adverse weather conditions have compromised the integrity of the tarp, provided that the compromised tarp poses a safety hazard. *Adverse weather* includes high wind, hail, or storms that blow tarps off the field and create a hazard, eg, tarps blowing into power lines and onto roads. A *compromised tarp* is a tarp that due to an adverse weather condition is no longer performing its intended function and is creating a hazard.
 - If tarps are removed before the required 5 days have elapsed due to adverse weather, the events must be documented in the post-application summary.
- **Early Tarp Perforation for Flood Prevention Activities**
 - Tarp perforation is allowed before the 5 days have elapsed.
 - Tarps must be immediately retucked and packed after soil removal.

MIDAS 33:67 PRE-PLANT FIELD FUMIGATION METHODS

Fumigation with MIDAS 33:67 shall only be performed in accordance with the following three application techniques: 1) Raised Bed Application, 2) Broadcast/Flat Fume Application, or 3) Deep Injection Auger Probe Application (stone fruit, nut trees, vines, and field-grown ornamentals only). Application methods and rates of application for each of these methods are discussed in detail below.

MANDATORY GOOD AGRICULTURAL PRACTICES (GAPS) FOR BEDDED AND BROADCAST SHANK APPLICATIONS

In addition to the GAPS required for all soil fumigation applications, the following GAPS apply for bedded and broadcast shank injection applications:

Tarps

- Tarps must be installed immediately after the fumigant is applied to the soil.

Soil Preparation

- Trash pulled by the shanks to the ends of the field must be covered with tarp before making the turn for the next pass.

Soil Temperature

- The soil temperature at the depth of injection must not be less than 55° F or exceed 90° F at the beginning of the application.
- If air temperatures have been above 100° F in any of the three days prior to application, then soil temperature must be measured and recorded in the FMP.

Soil Moisture

- The soil must be moist 9 inches below the surface. The amount of moisture needed will vary according to the soil type. Surface soil generally dries rapidly and must not be considered in this determination.
- Soil moisture must be determined by one of the following methods:
 - The USDA Feel and Appearance Method for testing, or
 - An instrument, such as a tensiometer.
- If there is insufficient moisture 9 inches below the surface, the soil moisture must be adjusted. If irrigation is not available and there is adequate soil moisture below 9 inches, soil moisture can be adjusted by disking or plowing before fumigant injection. To conserve existing soil moisture, pretreatment irrigation or pretreatment tillage should be done as close to the time of application as possible.
- Measure soil moisture at a depth of 9 inches at either end of the field, no more than 48 hours prior to application.

Soil moisture determination using the USDA Feel and Appearance Method

- For **coarse** textured soils (fine sand and loamy fine sand) there must be enough moisture (50 to 75 percent available soil water moisture) so the soil is moist, forms a weak ball with loose and clustered sand grains on fingers, darkened color, moderate water staining on fingers; will not ribbon.
- For **moderately coarse** textured soils (sand loam and fine sandy loam) there must be enough moisture (50 to 75 percent available soil water moisture) so the soil is moist, forms a ball with defined finger marks, very light soil/water staining on fingers, darkened color will not stick.
- For **medium** textured soils (sandy clay loam, loam, and silt loam) there must be enough moisture (50 to 75 percent available soil water moisture) so the soil is moist, forms a ball, very light staining on fingers, darkened color, pliable, and forms a weak ribbon between the thumb and forefinger.
- For **fine** textured soils (clay, clay loam, and silty clay loam) there must be enough moisture (50 to 75 percent available soil water moisture) so the soil is moist, forms a smooth ball with defined finger marks, light soil/water staining on fingers, ribbons between thumb and forefinger.
- **For fields with more than one soil texture**, soil moisture content in the lightest textured (most sandy) areas must comply with this soil moisture requirement. Whenever possible, the field should be divided into areas of similar soil texture and the soil moisture of each area should be adjusted as needed. Coarser textured soils can be fumigated under conditions of higher soil moisture than finer textured soils; however, if the soil moisture is too high, fumigant movement will be retarded and effectiveness of the treatment will be reduced. Previous and/or local experience with the soil to be treated or the crop to be planted can often serve as a guide to conditions that will be acceptable. If there is uncertainty in determining the soil moisture content of the area to be treated, a local extension service agent, soil conservation service specialist, or pest control advisor (agriculture consultant) should be consulted for assistance.

Application Depth

- **For Tarped-Broadcast and Tarped-Bedded Applications:** The injection point must be a minimum of 6 inches from the nearest final soil/air interface.

Prevention of End Row Spillage

- Do not apply or allow fumigant to spill onto the soil surface. For each injection line either have a check valve located as close as possible to the final injection point, or drain/purge the line of any remaining fumigant prior to lifting injection shanks from the ground.
- Do not lift injection shanks from the soil until the shut-off valve has been closed and the fumigant has been depressurized (passively drained) or purged (actively forced out via air compressor) from the system.

Calibration, Set-up, Repair, and Maintenance for Application Rigs

- Brass, carbon steel or stainless steel fittings must be used throughout. Polyethylene tubing, polypropylene tubing, Teflon® tubing or Teflon® -lined steel braided tubing must be used for all low pressure lines, drain lines, and compressed gas or air pressure lines. All other tubing must be Teflon® -lined steel braided.
- Galvanized, PVC, nylon or aluminum pipe fittings must not be used.
- All rigs must include a filter to remove any particulates from the fumigant, and a check valve to prevent backflow of the fumigant into the pressurizing cylinder or the compressed air system
- Rigs must include a flowmeter or a constant pressure system with orifice plates to insure the proper amount of fumigant is applied.
- To prevent the backflow of fumigant into the compressed gas cylinder (eg, nitrogen, other inert gas, compressed air), if used, applicators must:
 - When applying MIDAS 33:67 from steel cylinders, using compressed gas, ensure that positive pressure is maintained in the cylinder at not less than 100 psi during the entire time it is connected to the application rig, (*This is not required for a compressed air system that is part of the application rig because if the compressor system fails the application rig will not be operable*).
 - When applying MIDAS 33:67 from drum-in-drum poly-totes, using compressed gas, maintain a positive pressure of 35 to 40 psi during the entire time it is connected to the application rig. (*This is not required for a compressed air system that is part of the application rig because if the compressor system fails the application rig will not be operable*).
 - Ensure that application rigs are equipped with properly functioning check valves between the compressed gas cylinder or compressed air system and the fumigant cylinder. The check valve is best placed on the outlet side of the pressure regulator, and is oriented to only allow compressed gas to flow out of the cylinder or compressed air out of the compressed air system.
 - Always pressurize the system with compressed gas or by use of a compressed air system before opening the fumigant cylinder valve.
- Before using a fumigation rig for the first time, or when preparing it for use after storage, the operator must check the following items carefully:
 - Check the filter, and clean or replace the filter element as required.
 - Check all tubes and chisels to make sure they are free of debris and obstructions.
 - Check and clean the orifice plates and screen checks, if installed.
 - Pressurize the system with compressed gas or compressed air, and check all fittings, valves, and connections for leaks using soap solution.
- Install the fumigant cylinder, and connect and secure all tubing. Slowly open the compressed gas or compressed air valve, and increase the pressure to the desired level. Slowly open the fumigant cylinder valve, always watching for leaks.
- When the application is complete, close the fumigant cylinder valve and blow residual fumigant out of the fumigant lines into the soil using compressed gas or compressed air. At the end of the application, disconnect all fumigant cylinders from the application rig. At the end of the season, seal all tubing openings with tape to prevent the entry of insects and dirt.

Application equipment must be calibrated and all control systems must be working properly. Proper calibration is essential for application equipment to deliver the correct amount of fumigant uniformly to the

soil. Refer to the manufacturer's instructions on how to calibrate your equipment, usually the equipment manufacturer, fumigant dealer, or Cooperative Extension Service can provide assistance.

RAISED BED APPLICATION

- Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of no less than 6 inches below the soil surface. The treated ground must be sealed using either:
 - Soil sealing at the time of application: The treated ground must be sealed using closing shoes, roller, compaction roller, cultipacker, or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarp being laid down (with fumigant injection) by tarp-laying equipment mounted on the application tractor; or
 - Bed shaper: The chisels shall be placed with the injection point under the bed shaper, and the tarp shall be laid down simultaneously (with fumigant injection) by tarp-laying equipment mounted on the application tractor; or
 - Combination bed former and bed shaper: The chisels shall be placed between the bed former and the bed shaper. The tractor with the tarp-laying equipment shall immediately follow the application tractor.
- Injection depth of between 6 and 15 inches. The injection depth in preformed beds must not be below the bed furrow.
- Injection spacing of 12 inches or less typically performed with a multiple shank applicator.
- Planting shall not occur for at least 10 days after application (refer to RAISED BED SOIL FUMIGATION TABLE below).

Application Rates for Raised Bed Fumigation: Rates in the table below are given in pounds of MIDAS 33:67 per broadcast acre. The amount of product applied will be proportionate to the row spacing and width of the raised bed. To calculate the amount of product to be applied, multiply the application rate in lbs MIDAS 33:67/broadcast acre by the appropriate modifier from the Field Rate Modifier Table provided below.

RAISED BED SOIL FUMIGATION TABLE		
Crop	MIDAS 33:67 Per Broadcast Acre¹	Time Between² Application and Planting
Field-Grown Ornamentals Peppers Strawberries Tomatoes	Standard Tarp 300 - 520 lbs/Broadcast Acre (19.9 - 34.4 gal/Broadcast Acre)	10 - 14 days ³
	Highly Retentive Film⁴ 175-250 lbs/Broadcast Acre 11.6 - 16.6 gal/Broadcast Acre	14 - 21 days when using highly retentive film
NOTE: <p>¹ For fields infested with Nutsedge and Malva, apply a minimum of 450 lbs/broadcast acre (29.8 gal/acre) of MIDAS 33:67 with standard film and 250 lbs/broadcast acre (16.6 gal/acre) with highly retentive film.</p> <p>² If tarps are cut for removal before planting, aerate a minimum of 2 hours after tarps are cut before removing tarps. Wait at least 5 days after application before cutting standard tarps. Wait at least 10 days after application before cutting highly retentive films.</p> <p>³ Use the longer planting restriction period under conditions of high soil moisture, heavy soils, or rain.</p> <p>⁴ Contact your Arysta LifeScience representative for approved films and rate reduction recommendations.</p>		

Field Rate Modifier Table for Raised Bed Applications

Row Spacing (inches)	Bed Width (inches)	Field Rate Modifier
72	40	0.55
72	36	0.50
72	32	0.44
72	30	0.42
72	28	0.39
66	32	0.48
66	30	0.45
66	28	0.42
66	24	0.36
60	30	0.50
60	28	0.47
48	28	0.58

BROADCAST / FLAT FUME APPLICATION

- Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of 6 to 15 inches below the soil surface.
 - Soil sealing at time of application: The treated ground must be sealed using closing shoes, roller, compaction roller, cultipacker or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarp being laid down (with fumigant injection) by tarp-laying equipment mounted on the application tractor.
- Planting shall not occur for at least 10 days after application.
- This product may be applied by broadcast/flat fume application with standard tarps at rates in the following table:

APPLICATION RATES FOR BROADCAST / FLAT FUME FUMIGATION WITH STANDARD TARPS		
Crop	MIDAS 33:67 Per Acre¹	Time Between Application and Planting²
Field-Grown Ornamentals Peppers Strawberries Tomatoes Turf	300 – 520 lbs/Acre (19.9 – 34.4 gal/Acre)	10 – 14 days
Stone Fruits (Apricot, Sweet Cherry, Tart Cherry, Nectarine, Peach, Plum, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot, Fresh Prune) Tree Nuts (Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (Hazelnut), Hickory Nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Black Walnut, English Walnut) Vines (Table, Raisin and Wine Grape)	360- 520 lbs/Acre (23.8 – 34.4 gal/Acre)	10 – 14 days
Nurseries (including strawberries, stone fruits, tree nuts and conifer trees)	520 lbs/Acre (34.4 gal/Acre)	10 – 14 days

APPLICATION RATES FOR BROADCAST / FLAT FUME FUMIGATION WITH STANDARD TARPS		
Crop	MIDAS 33:67 Per Acre¹	Time Between Application and Planting²
NOTE: ¹ For fields infested with Nutsedge and Malva apply a minimum of 300 lbs/acre (19.9 gal/acre) of MIDAS 33:67. ² Wait at least 5 days after application before cutting tarps. Aerate a minimum of 2 hours after tarps are cut before removing tarps. Use the longer planting interval under conditions of high soil moisture, heavy soils, or rain.		

Application Rates for Broadcast/Flat Fume Fumigation with Highly Retentive Films

Contact your Arysta LifeScience North America representative for information on approved films and rate reduction recommendations. Applications using highly retentive film shall not exceed 300 lbs/Acre (19.9 gal/Acre).

Cutting and Removal of Highly Retentive Films for Broadcast/Flat Fume Applications

- Do not cut highly retentive films until at least 10 days following the application. Wait a minimum of 14 days after application before planting.
- When tarps are removed from the field, removal shall begin no sooner than 2 hours after tarp cutting has been completed (a task which cannot occur until a minimum of 10 days after application, as stated above).
- Planting shall not occur for at least 14 days after application.

PREPLANT DEEP INJECTION AUGER-PROBE APPLICATION

MANDATORY GOOD AGRICULTURAL PRACTICES (GAPS)

This application method is used when MIDAS 33:67 is applied to individual tree sites in an existing orchard where shank or drip applications are not possible.

In addition to the GAPS required for all MIDAS 33:67 soil fumigation applications, the following GAPS apply for MIDAS preplant deep injection auger-probe applications:

Site Preparation

- Each individual site must remove the stump and primary root system with a back-hoe or other similar equipment, for example an auger.
- The hole must be backfilled with soil before application.

Application Depth

- The fumigant must be injected at least 18 inches into the soil.

System Flush

- Before removing the application wand from the soil the wand must be cleared using nitrogen or compressed air.

Soil Sealing

- After the wand is cleared and removed from the soil, the injection hole must be either covered with soil and tamped; or the soil must be compacted over the injection hole.

For Stone Fruit Trees, Tree Nuts, Vines, and Field Grown Ornamental Trees and Shrubs, use 2 lbs of MIDAS 33:67 per injection site. Use 1 injection site per 100 square feet (ie, one injection site every 10 feet in a standard grid pattern). Planting or replanting of Stone Fruit Trees, Tree Nuts, Vines, and Field-Grown Ornamental Trees and Shrubs may begin 14 days after treatment. DO NOT PLANT if the odor of chloropicrin is detectable.

Do not treat trees, shrubs or vines with more than 175 lbs ai per acre of iodomethane and 350 lbs ai per acre of chloropicrin.

Buffer Zones

- 25 feet if the application rate is less than 150 lbs MIDAS 33:67 per acre.
- 50 feet if application rate is 150 to 379 lbs MIDAS 33:67 per acre, and
- 100 feet if the application rate is 380 to 520 lbs MIDAS 33:67 per acre.

ROTATIONAL CROPS

Food crops other than strawberry, tomatoes, and peppers require a 4 month plant back rotation restriction from the date of fumigant application. Crop rotation to non-food crops or non-bearing fruit or nut trees is not restricted.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store in a dry, cool, well-ventilated area under lock and key. When appropriate to prevent tipping, store cylinders upright, secured to a rack or wall. Post as a pesticide storage area.

Handling: Product cylinders shall not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging or sliding. Do not use rope slings, hooks, tongs, or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured.

Do not remove valve protection bonnet and safety cap until immediately before use. When cylinder is not in use, close valve by turning clockwise until hand tight, screw safety cap onto valve outlet, and replace protection bonnet.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Return of Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

This pesticide container, whether full or partially used, is the property of the manufacturer or distributor where it was purchased and must be returned to the distributor of origin. Do not ship containers without safety caps or valve protection bonnets. Containers shall never be refilled by the consumer or used for any other product or purpose.

FOR 24-HOUR CHEMICAL EMERGENCY (spill, leak, fire or accident) ASSISTANCE:
Call CHEMTREC at 1-800-424-9300

Warranty and Disclaimer Statement

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America, LLC ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF ARYSTA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF ARYSTA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT ARYSTA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.

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**RESTRICTED USE PESTICIDE
DUE TO ACUTE TOXICITY**

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

MIDAS® 33:67

FOR SALE AND USE IN STATES OTHER THAN FLORIDA

Only For Pre-Plant Fumigations of Fields Intended for Commercial Production of Listed Crops and Field-Grown Ornamentals, for the Control of Soil-Borne Pests Including Weed Seeds, Nematodes, Insects, and Diseases.

ACTIVE INGREDIENTS:

Iodomethane.....32.93%

Chloropicrin66.67%

OTHER INGREDIENTS:0.40%

TOTAL:.....100.00%

One gallon weighs 15.1 pounds (5 pounds Iodomethane and 10.1 pounds Chloropicrin).

**KEEP OUT OF REACH OF CHILDREN
DANGER / PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail).

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person.

HOT LINE NUMBERS

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL:

1-866-303-6952 or 1-651-632-8946

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage. Symptoms of overexposure may include irritation to eyes, skin, and respiratory system, shortness of breath, nausea, vomiting, dizziness, ataxia, slurred speech, drowsiness, blurred vision, staggering gait and mental imbalance, with probable recovery after period of no exposure. Treatment is symptomatic.

EPA Reg. No. 66330-59
EPA Est. No.

For Product Information Call: 1-866-761-9397

Net Contents: _____ LBS.

Manufactured for
Arysta LifeScience North America, LLC
15401 Weston Parkway, Suite 150
Cary, NC 27513

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

Danger. Corrosive. Causes irreversible eye damage. Corrosive to skin. Causes skin burns. May be fatal if inhaled or swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin or on clothing. Do not breathe vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Certain activities are prohibited from being performed in the application block ie, the field or portion of a field treated with a fumigant in any 24-hour period) or surrounding buffer zone during the buffer zone period by anyone other than persons who have been appropriately trained and equipped as handlers in accordance with the requirements in the Worker Protection Standard (40 CFR Part 170), from the start of the application until the entry restricted period ends. Those activities are listed in the following PPE section.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers (to include tractor drivers, supervisors, co-pilots, shovelers, cross ditchers, and tarp monitors) present on the application site or within the buffer zone (see exception for transient travel under heading "Buffer Zone") **must wear:**

- Loose fitting or well ventilated long-sleeved shirt and long pants. Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles.
- A half-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C). For tractor drivers and co-pilots the following can be used in lieu of an air-purifying respirator, unless sensory irritation is experienced:
 - A tractor equipped with a working-area air-fan dilution system consisting of a ducted fan/blower which provides air flow to the breathing zone of the tractor driver and co-pilot. The fan/blower must be mounted so that the fan/blower intake is at least 126 inches from the ground, and the fan/blower must be capable of operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.
- To determine whether a full-face air purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent, is required or if operations must cease for any person performing a handling task as stated on this label, see the **Respiratory Protection and Stop Work Triggers** section below.

Other handlers (to include planters, hole punchers, tarp cutters, tarp removers, tarp remover drivers, and persons involved with tarp and irrigation repair, air monitoring, scouting/crop advising) present on the application block from the start of the application until 14 days following the end of the application for unperforated tarps that are removed during those 14 days; or until tarp removal is complete if tarps are **both perforated and** removed less than 14 days after application; or until 48 hours after tarp perforation is completed if the tarps will not be removed within 14 days after application;; and within the buffer zone from the start of the application until 48 hours following the end of the application (see exception for transient travel under heading "Buffer Zone") **must wear:**

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles,
- To determine whether a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent, is required or if operations must cease for any person performing a handling task as stated on this label, see the **Respiratory Protection and Stop Work Triggers** section below.

NOTE: See **Tarp Perforation and Removal** section for perforation requirements.

Applicators and other handlers when handling liquid (to include supervisors, loaders, tractor drivers, and persons involved with spill recovery, container disposal, and equipment repair) present on the application site and within the buffer zone (see exception for transient travel under heading "Buffer Zone") **must wear:**

- Loose fitting or well ventilated long-sleeved shirt and long pants
- Chemical-resistant gloves; apron, footwear; and socks. Some materials that are chemical-resistant to this product are barrier laminate or viton ≥ 14 mils. For more options, follow the instructions for category H on an EPA chemical-resistance category selection chart.
- Full face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles.
- A half face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C).
- To determine whether a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent, is required or if operations must cease for any person performing a handling task as stated on this label, see the Respiratory Protection and Stop Work Triggers section below.

Respiratory Protection and Stop Work Triggers

The following procedures must be followed to determine whether a full-face air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent, is required or if operations must cease for any person performing a handling task as stated in this label.

- If at any time any handler experiences sensory irritation (tearing, burning of the eyes or nose) then either:
 - A full-face air-purifying respirator must be worn by all handlers who remain in the application block and surrounding buffer zone, or
 - Operations must cease and handlers not wearing full-face air-purifying respirators must leave the application block and surrounding buffer zone.
- Handlers can remove full-face air-purifying respirators or resume operations if two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show that levels of chloropicrin have decreased to less than 0.15 ppm, provided that handlers do not experience sensory irritation. Samples must be taken where the irritation is first experienced.
- When using monitoring devices to monitor air concentration levels, a direct reading detection device, such as a Matheson-Kitagawa, Dräger, or Sensidyne device must be used. The devices must have a sensitivity of at least 0.15 ppm for chloropicrin.
- When full-face air-purifying respirators are worn, then air monitoring samples must be collected at least every 2 hours in the breathing zone of a handler performing a representative handling task.
- If at any time: (1) a handler experiences any sensory irritation when wearing a full-face air-purifying respirator, or (2) an air sample is greater than or equal to 1.5 ppm chloropicrin, then all handler activities must cease and handlers must be removed from the application block and surrounding buffer zone. If operations cease the emergency plan detailed in the FMP must be implemented.

- Handlers can resume work activities without full-face air-purifying respirators, if two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show levels of chloropicrin have decreased to less than 0.15 ppm, provided that handlers do not experience sensory irritation. During the collection of air samples a full-face air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the irritation is first experienced.
- During the collection of air samples a full-face air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken where the irritation is first experienced.
- Work activities can resume if the following conditions exist provided that a full-face air-purifying respirator is worn:
 - Two consecutive breathing zone samples for chloropicrin taken at the handling site at least 15 minutes apart must be less than 1.5 ppm but are greater than 0.15 ppm,
 - Handlers do not experience sensory irritation while wearing the full-face air-purifying respirator, and
 - Cartridges have been changed.

IMPORTANT: an air-supplying respirator ie, a respirator connected directly to a clean air source or a self-contained breathing apparatus (SCBA) is not permitted for routine handler tasks. Such respirators are only permitted in emergencies such as spill or leak or when corrective action is needed to reduce air levels to acceptable levels.

ENGINEERING CONTROL REQUIREMENTS

MIDAS 33:67 must be transferred through connecting hoses, pipes, and/or couplings sufficiently tight to prevent workers or other persons from coming in contact with the liquid.

- All hoses, piping, and tanks used in connection with this product shall be of a type appropriate for use under the pressure and vacuum conditions to be encountered.
- Hoses between any fumigant container and the flow divider must be Teflon® hoses reinforced with stainless steel wire braid or its equivalent.
- External sight gauges, if applicable, shall be equipped with valves so that pipes to sight gauge can be shut off in case of breakage or leakage.
- The mechanical transfer system must be adequate to make necessary measurements of the pesticide being used.
- Shut-off devices must be installed on the exit end of all cylinder connections and at all disconnect points to prevent leakage of product when the transfer is stopped and hose is removed or disconnected.
- The pressure in hoses used to move the product must not exceed the manufacturer's maximum pressure specifications.
- Check equipment to ensure good condition and integrity prior to each use.

User Safety Requirements

- Do not wear jewelry, gloves, goggles, tight clothing or any rubber protective clothing/boots that can trap iodomethane or chloropicrin vapors against your skin. Iodomethane and chloropicrin vapors can be trapped inside clothing and cause skin injury.
- Remove all clothing that comes in contact with liquid fumigant at once.
- Aerate all affected clothing thoroughly outdoor prior to washing with hot water and detergent.
- Discard clothing or absorbent materials, that have been drenched or heavily contaminated with this product. Do not reuse them.
- Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exists, use detergent and hot water. Keep and wash PPE separately from other laundry.
- Respirator Requirements: When a respirator is required for use with this product:

(a) Cartridges or canisters must be replaced when odor or irritation from this product becomes apparent, if the measured concentration of chloropicrin is greater than or equal to 1.5 ppm, or after 8 hours of use, whichever occurs first;

(b) Employers must ensure that any handler who uses a respirator is:

- Fit-tested and fit-checked using a program that conforms to OSHA's requirements (described in 29 CFR Part 1910.134);
- Examined by a qualified medical practitioner to ensure physical ability to safely wear the style of respirator to be worn. A qualified medical practitioner is a physician or other licensed health care professional who will evaluate the ability of a worker to wear a respirator. The initial evaluation consists of a questionnaire that asks about medical conditions (such as a heart condition) that would be problematic for respirator use. If concerns are identified, then additional evaluations, such as a physical exam, might be necessary. The initial evaluation must be done before respirator use begins. Handlers must be reexamined by a qualified medical practitioner if their health status or respirator style or use-conditions change.

USER SAFETY RECOMMENDATIONS

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing and gloves immediately if pesticide gets inside, then wash skin thoroughly and put on clean clothing and gloves.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to mammals and birds. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate. Iodomethane and chloropicrin have certain properties and characteristics in common with chemicals that have been detected in ground water (iodomethane and chloropicrin are highly soluble in water and have low adsorption to soil).

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat, open flames, or sparking electrical equipment. Do not use application devices containing natural rubber, aluminum, magnesium or their alloys.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift.

PROTECTION FOR HANDLERS

Only Certified Applicators (certified by the state and trained by Arysta) in the proper handling, worker protection, and application of MIDAS 33:67 soil fumigant and protected handlers under their direct supervision may be present in the treatment area during application. From the start of the application until the fumigant has stopped being delivered/dispensed into the soil, ie; after the soil is sealed. An Arysta trained and state Certified Applicator must be at the fumigation site and within the line of sight to directly supervise handlers during the application. The results of monitoring activities must be captured in the Fumigant Management Plan (FMP) post-application summary.

For handling activities that take place after the fumigant has been delivered/dispensed into the soil until the entry period expires, the Certified Applicator does not have to be on-site, but must have

communicated, in a manner that can be understood, to the site owner/operator and handlers responsible for carrying out those activities the information necessary to comply with the label and procedure described in the FMP. Communication activities must be captured in the FMP.

IMPORTANT: This requirements does not override the requirements in the Worker Protection Standard for Agricultural Pesticides for information exchange between owners/operators of agricultural establishments and commercial pesticide applicators.

The Certified Applicator must provide fumigant safe handling information to each handler involved in the application or confirm that each handler participating in the application has received fumigant safe handling information in the past 12 months.

For all handling tasks at least two handlers trained under the provisions of the WPS 40 CFR 170.230 must be present.

The employer of any handler must confirm that an air-purifying respirator and appropriate cartridges of the type specified in the PPE section of this labeling are immediately available for each handler who will wear one. This must be documented in the FMP.

The employer of any handler must confirm that at least one air-rescue device (eg, SCBA) is on-site and is ready for use in case of an emergency. This must be documented in the FMP.

Exclusion Of Non-Handlers From Application Block:

The Certified Applicator supervising the application and the owner/operator of the establishment where the fumigation is taking place must make sure that all persons who are not trained and PPE-equipped and who are not performing one of the handling tasks as stated in this labeling are excluded from the application block during the entry restricted period.

For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Buffer Zone

The area adjacent to the treated area is referred to as the buffer zone. The buffer zone shall extend from the edge of the treated area in all directions. See Buffer Zone Table. The minimum buffer zone distance shall be 25 feet.

The Certified Applicator supervising the soil fumigation is responsible for the following:

1. Calculating the appropriate size of the buffer zone that must be maintained from the start of the application until 48 hours following the end of the application;
2. Establishing and maintaining the buffer zone from the start of the application until 48 hours following the end of the application. The Certified Applicator must use an appropriate means to manage and maintain the buffer zone such as posting fumigant warning signs around the perimeter of the buffer zone at potential points of entry, using trained workers to patrol the buffer zone, or other equivalent means. If fumigant warning signs are used, they must be posted from the start of the application until 48 hours following the end of the application and they must include the same warning symbol and statements required for Fumigant Treated Area signs under AGRICULTURAL USE REQUIREMENTS with the exception that signs will indicate "Fumigant Buffer Zone" at the top of the sign and will delete the statement "areas under fumigation". If "Fumigant Buffer Zone" signs are used, the signs must be removed within 3 days of the end of the buffer zone period.
3. Ensuring that unprotected workers and bystanders do not enter the buffer zone from the start of the application until 48 hours following the end of the application. Exception: Unprotected workers and bystanders may travel through (but not engage in any activity in) the buffer zone during the application and the 48-hour period following the end of the application, provided their total exposure time in any 24-hour period is 15 minutes or less. However, travel by unprotected workers or bystanders through the fumigated area itself is prohibited during the entire 5-day Entry Restricted period. Handlers protected with required Personal Protective Equipment (PPE) may work in buffer zones. See the PERSONAL PROTECTIVE EQUIPMENT section.
4. Ensuring application site has a distinctive buffer zone. The buffer zone of the field to be treated cannot overlap the buffer zone of another field treated within the last 48 hours.
5. Ensuring that there are no occupied nursing homes, hospitals, or prisons; and no occupied licensed schools, licensed day care facilities and licensed assisted living facilities (licensed by state or local governments) within $\frac{1}{4}$ mile of the fumigated area during the buffer zone period.
6. Documenting how the buffer zone was determined, and providing the information specified below concerning occupied structures within the buffer zone; and nursing homes, hospitals, or prisons; or licensed schools, licensed day care facilities, or licensed assisted living facilities (licensed by state or local governments) within $\frac{1}{4}$ mile of the fumigated area. Records must include buffer zone calculations; diagrams; and maps. Records must also identify nursing homes, hospitals, or prisons; or licensed schools, licensed day care facilities, or licensed assisted living facilities (licensed by state or local governments) within $\frac{1}{4}$ mile of the fumigation area, and document how it was determined that such sites would be unoccupied during the application period. These records must be maintained by the Certified Applicator and by the owner/operator of the fumigated site for at least two years following the fumigation and must be made available, upon request to Federal, State, Tribal, and local enforcement personnel.

Determining Buffer Zone Distance

- Determine the size of the buffer zone using the following Buffer Zone Table.
- The size of the buffer zone will be dependent on the following three factors:
 - The number of field acres that are being treated with MIDAS 33:67.
 - The pounds of MIDAS 33:67 that are being applied per treated acre.
 - Buffer zone reduction credits.

Buffer Zone Table

MIDAS 33:67 Application Rate (Lbs per Treated Acre) ⁴	SIZE OF FIELD IN ACRES (Buffer zone distance in feet) ^{1,2}							
	Up to 5 Acres	6 – 10 Acres	11-15 Acres	16- 20 Acres	21-25 Acres	26-30 Acres	31-35 Acres	36-40 ³ Acres
100	25	25	45	60	70	80	90	95
150	25	30	60	85	100	115	130	145
175	25	35	70	100	120	135	150	165
200	25	40	80	115	135	155	175	190
250	25	50	95	140	165	190	215	235
300	30	60	115	170	200	230	260	285
350	35	70	135	200	235	265	300	330
360	35	70	140	205	240	275	310	340
400	40	75	150	225	265	305	345	380
500	50	95	190	285	335	380	430	475
520	50	100	200	300	350	400	450	500

1. For rates not listed on this table, use the buffer zone for the next highest rate, or use the following calculation to determine the exact buffer zone:

$$\text{Buffer Zone for Application Rate Not Listed} = \frac{\text{Known Buffer Zone on Table} \times \text{Application Rate Not Listed}}{\text{Rate of Application for Known Buffer Zone}}$$

2. Buffer Zone Reduction Credits:

Reduce buffer zone by 10% for each factor listed below:

- Use of flat fume / broadcast application
- Use of highly retentive films. Highly retentive films for which credit can be applied must be on an Arysta approved list. Examples of Arysta approved films are Canslit Brand Metalized 1.3 ml, Pliant Blockade® VIF 1.25 ml, or Pliant Metalized 1.0-1.25.
- Application to soils having >3% organic matter Refer to the USDA or USGS Soil Survey Maps for the treated area that identify the range of organic matter and / or a documented soil survey report that lists range of % organic matter for the treated area. Collection of samples for analysis of soil in the treated area should follow procedures as per USDA's Natural Resource Conservation Services methods. Information on soil sampling can be found at www.soil.usda.gov.

For example, if the Buffer Zone is 50 feet and the application qualifies for a buffer zone reduction credit such as use of highly retentive film, then the buffer zone can be reduced by 10%, ie, reduced by 5 feet based on the following calculation: 50 ft – (50 ft X 10%) = 45 feet.

If the application qualifies for two buffer zone reduction credits such as use of highly retentive film and soil with >3% organic matter, then the buffer zone can be reduced by 20%, ie, reduced by 10 feet based on the following calculation: 50 ft – (50 ft X 20%) = 40 feet.

3. Applications are limited to 40 contiguous acres or less per day
4. For raised bed applications, the treated area is the raised bed not the untreated furrows. As an example, if a raised bed field is 50% raised bed (treated) and 50% furrow (untreated), and 350 lbs of MIDAS 33:67 is applied to the raised beds of the field, then the effective application rate to the treated raised bed is 350 lbs per treated acre; and that is the rate that would determine the buffer zone.

Note: Minimum allowable buffer zone is 25 feet regardless of buffer zone reduction credits.

Buffer Zone for Pre-Plant Deep Injection Auger

- 25 feet if the application rate is less than 150 lbs MIDAS 33:67 per acre.
- 50 feet if application rate is 150 to 379 lbs MIDAS 33:67 per acre, and
- 100 feet if the application rate is 380 to 520 lbs MIDAS 33:67 per acre.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), restricted entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

For the entry restricted period and notification requirements, see the **Entry Restricted Period and Notification** section below.

Entry Restricted Period

Entry (including early entry that would otherwise be permitted under the WPS) by any person, other than a correctly trained and PPE-equipped handler who is performing a handling task listed on this labeling, is **PROHIBITED** from the start of the application until:

- 5 days after application is complete if tarps are not perforated and removed for at least 14 days following application, or
- 48 hours after tarp perforation is complete if tarps will not be removed for at least 14 days following application, or
- Until tarp removal is complete if tarps are both perforated and removed less than 14 days after application.

NOTE: See **Tarp Perforation and/or Removal** section on this labeling for requirements about when tarps are allowed to be perforated.

Notification at Entrances To Treated Areas

Notify workers of the fumigation by warning them verbally and by posting Fumigant Treated Area signs. The Fumigant Treated Area signs must bear the skull and crossbones symbol and state:

- (1) "DANGER/PELIGRO"
- (2) "Areas under fumigation, DO NOT ENTER/NO ENTRE"
- (3) Iodomethane and Chloropicrin Fumigants in Use
- (4) Date and time of fumigation
- (5) Date and time entry restricted period is over
- (6) MIDAS 33:67
- (7) Name, address, and telephone number of the Certified Applicator in charge of the fumigation.

Post the fumigant Treated Area signs instead of the WPS signs for this application but follow all WPS requirements pertaining to location, legibility, size and timing of posting and removal.

Post the Fumigant Treated Area signs at all entrances to the application block (i.e., the field portion of a field treated with a fumigant in any 24-hour period.)

GENERAL INFORMATION AND INSTRUCTIONS

This fumigant is a highly hazardous material. All uses of this fumigant are covered under the Worker Protection Standard, and must be conducted in accordance with all of the requirements of the Worker Protection Standard (40 CFR Part 170). It is a restricted use pesticide that must only be used by Certified Applicators, certified by the state and trained by Arysta, in the proper handling, worker protection, and application of MIDAS 33:67 soil fumigant and handlers under their direct supervision. Before using, read the entire label and follow all use directions and precautions. All persons working with this fumigant must

be knowledgeable about the hazards and trained in the use of required air-purifying respirator equipment and detector devices, emergency procedures and proper use of the fumigant.

The maximum application rate for preplant soil uses is 175 lbs ai per acre of iodomethane and 350 lbs ai per acre of chloropicrin.

GENERAL USE PRECAUTIONS

- Follow all local government instructions for posting of treated areas and post all treated areas with warning signs.
- Comply with all local ordinances and regulations.
- Do not apply within ¼ mile of nursing homes, hospitals or prisons; or licensed schools, licensed day care facilities or licensed assisted living facilities (licensed by state or local governments) that will be occupied during the buffer zone period.
- Applications are limited to 40 contiguous acres or less per day.
- Never fumigate alone. A minimum of two persons must be present during handling and application of soil fumigants. These persons must be Certified Applicators or handlers under the direct supervision and within the line of sight of a Certified Applicator.
- Additional instructions must be made available to handlers in the mechanical operation of the tractor and how to safely work with the operator while fumigating.
- Always handle this product in the open, with all handlers positioned "upwind" from the container and/or where there is adequate ventilation.
- Check the fumigation system for leaks or worn out equipment prior to soil injection.
- When fumigating from a tractor, it is required that 5 gallons of water be carried on the tractor and readily available for rinsing and cleaning purposes. An additional 5 gallons of water must be available in the service truck. This water must be potable and in containers marked "Decontamination water not to be used for drinking."
- For broadcast/flat fume applications, keep all pets, livestock and other domestic animals out of the treated areas until tarps have been removed.
- For raised bed applications, keep all pets, livestock and other domestic animals out of the treated areas for 5 days. Most raised bed applications will not result in tarp removal.
- See AGRICULTURAL USE REQUIREMENTS box for details regarding posting and placement of Fumigant Treated Area signs.

SPILL AND LEAK PROCEDURES

- Refer to the Personal Protective Equipment section for Applicators and other handlers when handling liquid from spills and leaks.
- Cease all operations if any leak develops in the fumigation system.
- Evacuate everyone from the immediate areas of the spill or leak.
- Approach the area from the upwind side. Work upwind to repair leak(s), if possible.
- Allow spilled fumigant to evaporate or to absorb onto vermiculite, dry sand, earth, or similar absorbent material. Such material should be disposed of on site or at an approved disposal facility.
- Contaminated soil, water and other cleanup debris may be hazardous waste. Report any spill that exceeds 302 lbs (20 gallons of product) to the National Response Center at 1-800-424-8802.

SITE-SPECIFIC FUMIGATION MANAGEMENT PLAN (FMP)

Prior to the start of fumigation, the Certified Applicator supervising the application must verify that a site-specific FMP exists for each application block (ie, a field or portion of a field treated with a fumigant in any 24-hour period). In addition, an agricultural operation fumigating multiple application blocks may format the FMP in a manner whereby all of the information that is common to all the application blocks is captured once, and any information unique to a particular application block or blocks is captured in subsequent sections.

The FMP must be prepared by the Certified Applicator, the site owner/operator, registrant or other party.

The Certified Applicator must verify in writing (sign and date) that the site-specific FMP(s) reflects current site conditions before the start of fumigation.

Each site-specific FMP must contain the following elements:

- Applicator information (name, phone number, pesticide applicator license number, employer name, employer address)
- General site information
 - Application block location (eg, county, township-range-section quadrant), address, or global positioning system (GPS) coordinates
 - Name, address, and phone number of owner/operator of the application block
- General application information (target application date/window, brand name of fumigant, EPA registration number)
- Tarp information and procedures for repair, perforation, and removal (if tarp is used)
 - Brand name, lot number, thickness
 - Name and phone number of person responsible for repairing tarps
 - Schedule for checking tarps for damage, tears, and other problems
 - Maximum time following notification of damage that the person(s) responsible for tarp repair will respond
 - Minimum time following application that tarp will be repaired
 - Minimum size of damage that will be repaired
 - Other factors used to determine when tarp repair will be conducted
 - Name and phone number of person responsible for perforating and/or removing tarps (if other than Certified Applicator)
 - Equipment/methods used to perforate tarps
 - Schedule and target dates for perforating tarps
 - Schedule and target dates for removing tarps
- Soil conditions (description of soil texture in application block, method used to determine soil moisture)
- Weather conditions (summary of forecasted conditions for the day of the application and the 48-hour period following the fumigant application)
 - Wind speed
 - Inversion conditions (eg, shallow, compressed (low-level) temperature inversion)
 - Air stagnation advisory
- Air-purifying respirators, air-rescue devices, and other personal protective equipment (PPE) for handlers (handler task, protective clothing, air-purifying respirator type, respirator cartridge type, respirator cartridge replacement schedule, air-rescue device type, eye protection, gloves, other PPE)
- Emergency procedures (evacuation routes, locations of telephones, contact information for first responders, local/state/federal/tribal contacts, key personnel and emergency procedures/responsibilities in case of an incident, equipment/tarp/seal failure or complaints, or other emergencies).
- Fumigant Treated Area posting procedures (person(s) who will post Fumigant Treated Area signs, location of Fumigant Treated Area signs, procedures for Fumigant Treated Area sign removal)
- Plan describing how communication will take place between the applicator, land owner/operator, and other on-site handlers (eg, tarp perforators/removers, irrigators) for complying with label requirements (eg, timing of tarp perforation and removal, PPE).

- Name and phone number of persons contacted
- Date contacted
- Authorized on-site personnel
 - Names, addresses and phone numbers of handlers
 - Names, addresses and phone numbers for employees of handlers
 - Tasks that each handler is authorized and trained to perform
 - For handlers designated to wear air-purifying respirators (an air-purifying respirator is required for a minimum of 2 handlers):
 - date of medical qualification to wear an air-purifying respirator
 - date of air-purifying respirator training, and
 - date of fit-testing for the air-purifying respirator.
- Air monitoring plan
 - If sensory irritation is experienced, indicate whether operations will be ceased or operations will continue with an air-purifying respirator
 - If the intention is to cease operations when sensory irritation is experienced, provide the name, address, and phone number of the handler that will perform monitoring activities prior to operations resuming
 - When air-purifying respirators are worn:
 - Representative handler tasks to be monitored
 - Monitoring equipment to be used and timing of monitoring
- Good Agricultural Practices (GAPs)
 - Description of applicable mandatory GAPs (registrants may also include optional GAPs)
 - Measurements and documentation to ensure GAPs are achieved (eg, measurement of soil and other site conditions)
- Description of hazard communication. (The application block has been posted in accordance with the label. Pesticide product labels and material safety data sheets are on-site and readily available for employees to review.)
- Record-keeping procedures (the owner/operator of the application block as well as the Certified Applicator must keep a signed copy of the site-specific FMP for 2 years from the date of application).

For situations where an initial FMP is developed and certain elements do not change for multiple fumigation sites (eg, applicator information, authorized on-site personnel, record-keeping procedures, emergency procedures) only elements that have changed need to be updated, in the site-specific FMP provided the following:

- The Certified Applicator supervising the application has verified that those elements are current and applicable to the application block before it is fumigated.
- Record-keeping requirements are followed for the entire FMP (including elements that do not change).

Once the application begins, the Certified Applicator must make a copy of the FMP available for viewing by handlers involved in the fumigation. The Certified Applicator or the owner operator of the application block must provide a copy of the FMP to any local/state/federal/tribal enforcement personnel who request the FMP. In the case of an emergency, the FMP must be made immediately available when requested by local/state/federal/tribal emergency response and enforcement personnel.

Within 30 days of completing the application portion of the fumigation process, the Certified Applicator supervising the application must complete a post-application summary that describes any deviations from the FMP that have occurred, measurements taken to comply with GAPs, monitoring results as well as any complaints and/or incidents that have been reported to him/her.

The Post-Application Summary must contain the following elements:

- Actual date of the application, application rate, and size of application block fumigated
- Summary of weather conditions on the day of the application and during the 48-hour period following the fumigant application
- Soil temperature measurement (if air temperatures were above 100 degrees F in any of the 3 days prior to the application)
- Tarp damage and repair information (if applicable)

- Location and size of tarp damage
- Description of tarp/tarp seal/tarp equipment failure
- Date and time of tarp repair
- Tarp perforation/removal details (if applicable)
 - Description of tarp removal (if different than in the FMP)
 - Date tarps were perforated
 - Date tarps were removed
- Complaint details (if applicable)
 - Person filing complaint (eg, on-site handler, person off-site)
 - If off-site person, name, address, and phone number of person filing complaint
 - Description of control measures or emergency procedures followed after complaint.
- Description of incidents, equipment failure, or other emergency procedures followed (if applicable)
- Details of elevated air concentrations monitored on-site (if applicable)
 - Location of elevated air concentration levels
 - Description of control measures or emergency procedures followed
 - Air monitoring results
 - When sensory irritation experienced:
 - Date and time of sensory irritation
 - Handler task/activity
 - Handler location where irritation was observed
 - Resulting action (eg, cease operations, continue operations with air-purifying respirators)
 - When using a direct read instrument:
 - Sample date and time
 - Handler task/activity
 - Handler location
 - Air concentration
 - Sampling method
- Date of Fumigant Treated Area sign removal
- Any deviations from the FMP
- Record-keeping procedures (the owner/operator of the application block as well as the Certified Applicator must keep a signed copy of the post-application summary for 2 years from the date of application).

PROCEDURES PRIOR TO, DURING AND AFTER ALL APPLICATIONS

CONTROL OF SOIL BORNE PESTS: MIDAS 33:67 controls soil-borne pests including nematodes, insects, weed seeds, and diseases.

Midas 33:67 will control the following pests when present in soil at the time of treatment:

Weed Seeds, including broadleaf weeds such as nutsedge, pigweed, broomrape and lambsquarters, and grasses such as bermudagrass, and annual bluegrass. Effectiveness against hard seed weeds, such as mallow, dodder, morning glory, and certain leguminous weeds may be variable.

Plant-parasitic Nematodes, such as root-knot, root lesion (meadow), cyst, citrus, burrowing, false root-knot, lance, spiral, ring, sting, stubby root, dagger, awl, sheath and sting (stylet) nematodes.

Soil-borne Insects, such as wireworms, cutworms, grubs, rootworms, ants and garden symphylans.

Soil-borne Diseases, such as *Verticillium*, *Pythium*, *Rhizoctonia*, *Phytophthora*, and *Fusarium*.

MIDAS 33:67 is not to be used as a preventative treatment for pests that may be introduced after the fumigant has been applied and/or tarps removed. To reduce the potential for the re-introduction of pests (nematodes, weed seed and disease); avoid the use of irrigation water, transplants or equipment that

could carry pests into the planting area. Avoid moving infested soil back into the treated area through cultivation or other means.

Mandatory Good Agricultural Practices (GAPs)

The following GAPs must be followed during all fumigant applications. All measurements and other documentation planned to ensure that the mandatory GAPs are achieved must be recorded in the FMP and/or post-application summary.

Tarp Plan

A written tarp plan must be developed and included in the FMP. The plan must include:

- schedule and procedures for checking tarps for damage, tears, and other problems
- plans for determining when and how repairs to tarps will be made, and by whom
- minimum time following injection that tarp will be repaired
- minimum size of tarp damage that will be repaired
- other factors used to determine how and when tarp repair will be conducted
- schedule, equipment, and methods used to perforate tarps
- aeration plans and procedures following perforation of tarp, but prior to tarp removal or planting/transplanting
- schedule, equipment, and procedures for tarp removal

Weather Conditions

- Prior to fumigation the weather forecast for the day of the application and the 48-hour period following the fumigation must be checked to determine if unfavorable weather conditions exist (see ***Identifying Unfavorable Weather Conditions*** section) or are predicted and whether fumigation should begin.
- Wind speed at the application site must be a minimum of 2 mph at the start of the application or forecasted to reach at least 5 mph during the application.
- Do not apply if a shallow, compressed (low-level) temperature inversion is forecast to persist for more than 18 consecutive hours for the 48-hour period after the start of application, or if there is an air stagnation advisory issued by the National Weather Service in effect for the area in which the fumigation is planned.
- Detailed local forecasts for weather conditions, wind speed, and air stagnation advisories may be obtained on-line at: <http://www.nws.noaa.gov> For further guidance, contact your local National Weather Service Forecasting Office.
- ***Identifying Unfavorable Weather Conditions*** - Unfavorable weather conditions block upward movement of air, which results in trapping fumigant vapors near the ground. The resulting air mass can move off-site in unpredictable directions. These conditions typically exist prior to sunset and continue past sunrise and persist as late as noontime. Unfavorable conditions are common on nights with limited cloud cover and light to no wind and their presence can be indicated by ground fog or smog and can also be identified by smoke from a ground source that flattens out below a ceiling layer and moves laterally in a concentrated cloud.

Soil Preparation

- Soil must be properly prepared and at the surface generally be free of clods that are golf ball size or larger. The area to be fumigated must be tilled to a depth of at least 5 to 8 inches.
- Field trash must be properly managed. Residue from a previous crop must be worked into the soil to allow for decomposition prior to fumigation. Little or no crop residue shall be present on the soil surface. Crop residue that is present must not interfere with the soil seal. Removing the crop residue prior to fumigation is important to limit the natural "chimneys" that occur in the soil when crop residue is present. These "chimneys" allow the soil fumigants to move through the soil quickly and escape into the atmosphere. This may create potentially harmful conditions for workers and bystanders and limit the efficacy of the fumigant. However, crop residue on the field serves to prevent soil erosion from both wind and water and is an important consideration. To accommodate erosion control, fumigant efficacy, and human health protection, clear fields of crop residue as close to the timing of the fumigation as possible to limit the length of time that the soil would be exposed to potentially erosive weather conditions.

Soil Sealing

- **For Bedded Applications:** Preformed beds must be sealed by disruption of the chisel trace using press sealers, bed shapers, cultipackers, or by re-shaping (eg, relisting, lifting, replacing) the beds immediately following injection. Beds formed at the time of application must be sealed by disrupting the chisel trace using press sealers, or bed shapers.
- **For Broadcast Tarped Applications:** The use of a tarp does not eliminate the need to minimize chisel traces prior to application of the tarp, such as by using a Nobel plow or other injection shank that disrupts the chisel traces.

Prior to All Applications:

- Ensure that application equipment does not contain components made of natural rubber, aluminum, magnesium or their alloys.
- The soil must be sufficiently moist to allow seeds to swell (imbibe) in preparation for germination.

During All Applications:

- Except for deep injection auger-probe applications, immediately cover treated areas with a plastic tarp.
- Do not change cylinders when the fumigant system is under pressure. Change cylinders with all cylinder valves in the off position.

Following All Applications:

- To minimize the potential for crop injury, allow the fumigant to dissipate before planting a crop. Seeds may be used as a bioassay to determine if MIDAS 33:67 is present in the soil at concentrations sufficient to cause plant injury. See fumigation tables for planting requirements specific to the different application methods.
- Fumigation of highly acidic soils or those high in organic matter can cause ammonia toxicity to plants and or elevated levels of soluble salts in the soil causing phytotoxicity. Analyze soil following fumigation and fertilize as indicated. Avoid those fertilizers using ammonium salts.

Tarp Perforation and/or Removal

IMPORTANT: Persons perforating, repairing, removing, and/or monitoring tarps are defined, within certain time limitations, as handlers (see Personal Protective Equipment section) and must be provided the PPE and other protections for handlers as required on this labeling and in the Worker Protection Standard for Agricultural Pesticides.

- Tarps must not be perforated until a minimum of 5 days have elapsed after the fumigant injection into the soil is complete (eg, after injection of the fumigant and tarps have been laid), unless a weather condition exists which necessitates the need for early perforation or removal, see ***Early Tarp Removal for Broadcast Applications Only and Early Tarp Perforation for Flood Prevention Activities*** sections. In the case of applications using highly retentive films, tarps must not be perforated until 10 days have elapsed after the fumigant injection.
- If tarps will be removed before planting, tarp removal must not begin until at least 2 hours after tarp perforation is complete.
- If tarps will not be removed before planting, planting or transplanting must not begin until at least 48 hours after the tarp perforation is complete.
- If tarps are left intact for a minimum of 14 days after fumigant injection into the soil is complete, planting or transplanting may take place while the tarps are being perforated.
- Each tarp panel used for broadcast fumigation must be perforated.
- Tarps used for fumigations may be perforated manually **ONLY** for the following situations:
 - At the beginning of each row when a coulter blade (or other device which performs similarly) is used on a motorized vehicle such as an ATV.
 - In fields that are 1 acre or less.
 - During flood prevention activities.

- In all other instances tarps must be perforated (cut, punched, poked, or sliced) only by mechanical methods.
- Tarp perforation for broadcast fumigations must be completed before noon.
- For broadcast fumigations, tarps must not be perforated if rainfall is expected within 12 hours.
- **Early Tarp Removal for Broadcast Applications Only:**
 - Tarps may be removed before the required 5 days if adverse weather conditions have compromised the integrity of the tarp, provided that the compromised tarp poses a safety hazard. *Adverse weather* includes high wind, hail, or storms that blow tarps off the field and create a hazard, eg, tarps blowing into power lines and onto roads. A *compromised tarp* is a tarp that due to an adverse weather condition is no longer performing its intended function and is creating a hazard.
 - If tarps are removed before the required 5 days have elapsed due to adverse weather, the events must be documented in the post-application summary.
- **Early Tarp Perforation for Flood Prevention Activities**
 - Tarp perforation is allowed before the 5 days have elapsed.
 - Tarps must be immediately retucked and packed after soil removal.

MIDAS 33:67 PRE-PLANT FIELD FUMIGATION METHODS

Fumigation with MIDAS 33:67 shall only be performed in accordance with the following three application techniques: 1) Raised Bed Application, 2) Broadcast/Flat Fume Application, or 3) Deep Injection Auger Probe Application (stone fruit, nut trees, vines, and field-grown ornamentals only). Application methods and rates of application for each of these methods are discussed in detail below.

MANDATORY GOOD AGRICULTURAL PRACTICES (GAPs) FOR BEDDED AND BROADCAST SHANK APPLICATIONS

In addition to the GAPs required for all soil fumigation applications, the following GAPs apply for bedded and broadcast shank injection applications:

Tarps

- Tarps must be installed immediately after the fumigant is applied to the soil.

Soil Preparation

- Trash pulled by the shanks to the ends of the field must be covered with tarp before making the turn for the next pass.

Soil Temperature

- The soil temperature at the depth of injection must not be less than 55° F or exceed 90° F at the beginning of the application.
- If air temperatures have been above 100° F in any of the three days prior to application, then soil temperature must be measured and recorded in the FMP.

Soil Moisture

- The soil must be moist 9 inches below the surface. The amount of moisture needed will vary according to the soil type. Surface soil generally dries rapidly and must not be considered in this determination.
- Soil moisture must be determined by one of the following methods:
 - The USDA Feel and Appearance Method for testing, or
 - An instrument, such as a tensiometer.
- If there is insufficient moisture 9 inches below the surface, the soil moisture must be adjusted. If irrigation is not available and there is adequate soil moisture below 9 inches, soil moisture can be adjusted by discing or plowing before fumigant injection. To conserve existing soil moisture, pretreatment irrigation or pretreatment tillage should be done as close to the time of application as possible.
- Measure soil moisture at a depth of 9 inches at either end of the field, no more than 48 hours prior to application.

Soil moisture determination using the USDA Feel and Appearance Method

- For **coarse** textured soils (fine sand and loamy fine sand) there must be enough moisture (50 to 75 percent available soil water moisture) so the soil is moist, forms a weak ball with loose and clustered sand grains on fingers, darkened color, moderate water staining on fingers; will not ribbon.
- For **moderately coarse** textured soils (sand loam and fine sandy loam) there must be enough moisture (50 to 75 percent available soil water moisture) so the soil is moist, forms a ball with defined finger marks, very light soil/water staining on fingers, darkened color will not stick.
- For **medium** textured soils (sandy clay loam, loam, and silt loam) there must be enough moisture (50 to 75 percent available soil water moisture) so the soil is moist, forms a ball, very light staining on fingers, darkened color, pliable, and forms a weak ribbon between the thumb and forefinger.
- For **fine** textured soils (clay, clay loam, and silty clay loam) there must be enough moisture (50 to 75 percent available soil water moisture) so the soil is moist, forms a smooth ball with defined finger marks, light soil/water staining on fingers, ribbons between thumb and forefinger.
- For **fields with more than one soil texture**, soil moisture content in the lightest textured (most sandy) areas must comply with this soil moisture requirement. Whenever possible, the field should be divided into areas of similar soil texture and the soil moisture of each area should be adjusted as needed. Coarser textured soils can be fumigated under conditions of higher soil moisture than finer textured soils; however, if the soil moisture is too high, fumigant movement will be retarded and effectiveness of the treatment will be reduced. Previous and/or local experience with the soil to be treated or the crop to be planted can often serve as a guide to conditions that will be acceptable. If there is uncertainty in determining the soil moisture content of the area to be treated, a local extension service agent, soil conservation service specialist, or pest control advisor (agriculture consultant) should be consulted for assistance.

Application Depth

- **For Tarped-Broadcast and Tarped-Bedded Applications:** The injection point must be a minimum of 6 inches from the nearest final soil/air interface.

Prevention of End Row Spillage

- Do not apply or allow fumigant to spill onto the soil surface. For each injection line either have a check valve located as close as possible to the final injection point, or drain/purge the line of any remaining fumigant prior to lifting injection shanks from the ground.
- Do not lift injection shanks from the soil until the shut-off valve has been closed and the fumigant has been depressurized (passively drained) or purged (actively forced out via air compressor) from the system.

Calibration, Set-up, Repair, and Maintenance for Application Rigs

- Brass, carbon steel or stainless steel fittings must be used throughout. Polyethylene tubing, polypropylene tubing, Teflon® tubing or Teflon® -lined steel braided tubing must be used for all low pressure lines, drain lines, and compressed gas or air pressure lines. All other tubing must be Teflon® -lined steel braided.
- Galvanized, PVC, nylon or aluminum pipe fittings must not be used.
- All rigs must include a filter to remove any particulates from the fumigant, and a check valve to prevent backflow of the fumigant into the pressurizing cylinder or the compressed air system
- Rigs must include a flowmeter or a constant pressure system with orifice plates to insure the proper amount of fumigant is applied.
- To prevent the backflow of fumigant into the compressed gas cylinder (eg, nitrogen, other inert gas, compressed air), if used, applicators must:
 - When applying MIDAS 33:67 from steel cylinders, using compressed gas, ensure that positive pressure is maintained in the cylinder at not less than 100 psi during the entire time it is connected to the application rig, (*This is not required for a compressed air system that is part of the application rig because if the compressor system fails the application rig will not be operable*).
 - When applying MIDAS 33:67 from drum-in-drum poly-totes, using compressed gas, maintain a positive pressure of 35 to 40 psi during the entire time it is connected to the application rig. (*This*

is not required for a compressed air system that is part of the application rig because if the compressor system fails the application rig will not be operable).

- Ensure that application rigs are equipped with properly functioning check valves between the compressed gas cylinder or compressed air system and the fumigant cylinder. The check valve is best placed on the outlet side of the pressure regulator, and is oriented to only allow compressed gas to flow out of the cylinder or compressed air out of the compressed air system.
- Always pressurize the system with compressed gas or by use of a compressed air system before opening the fumigant cylinder valve.
- Before using a fumigation rig for the first time, or when preparing it for use after storage, the operator must check the following items carefully:
 - Check the filter, and clean or replace the filter element as required.
 - Check all tubes and chisels to make sure they are free of debris and obstructions.
 - Check and clean the orifice plates and screen checks, if installed.
 - Pressurize the system with compressed gas or compressed air, and check all fittings, valves, and connections for leaks using soap solution.
- Install the fumigant cylinder, and connect and secure all tubing. Slowly open the compressed gas or compressed air valve, and increase the pressure to the desired level. Slowly open the fumigant cylinder valve, always watching for leaks.
- When the application is complete, close the fumigant cylinder valve and blow residual fumigant out of the fumigant lines into the soil using compressed gas or compressed air. At the end of the application, disconnect all fumigant cylinders from the application rig. At the end of the season, seal all tubing openings with tape to prevent the entry of insects and dirt.

Application equipment must be calibrated and all control systems must be working properly. Proper calibration is essential for application equipment to deliver the correct amount of fumigant uniformly to the soil. Refer to the manufacturer's instructions on how to calibrate your equipment, usually the equipment manufacturer, fumigant dealer, or Cooperative Extension Service can provide assistance.

RAISED BED APPLICATION

- Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of no less than 6 inches below the soil surface. The treated ground must be sealed using either:
 - Soil sealing at the time of application: The treated ground must be sealed using closing shoes, roller, compaction roller, cultipacker, or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarp being laid down_(with fumigant injection) by tarp-laying equipment mounted on the application tractor; or
 - Bed shaper: The chisels shall be placed with the injection point under the bed shaper, and the tarp shall be laid down simultaneously (with fumigant injection) by tarp-laying equipment mounted on the application tractor; or
 - Combination bed former and bed shaper: The chisels shall be placed between the bed former and the bed shaper. The tractor with the tarp-laying equipment shall immediately follow the application tractor.
- Injection depth of between 6 and 15 inches. The injection depth in preformed beds must not be below the bed furrow.
- Injection spacing of 12 inches or less typically performed with a multiple shank applicator.
- Planting shall not occur for at least 10 days after application (refer to RAISED BED SOIL FUMIGATION TABLE below).

Application Rates for Raised Bed Fumigation: Rates in the table below are given in pounds of MIDAS 33:67 per broadcast acre. The amount of product applied will be proportionate to the row spacing and width of the raised bed. To calculate the amount of product to be applied, multiply the application rate in lbs MIDAS 33:67/broadcast acre by the appropriate modifier from the Field Rate Modifier Table provided below.

RAISED BED SOIL FUMIGATION TABLE		
Crop	MIDAS 33:67 Per Broadcast Acre ¹	Time Between ² Application and Planting
Field-Grown Ornamentals Peppers Strawberries Tomatoes	Standard Tarp 300 - 520 lbs/Broadcast Acre (19.9 – 34.4 gal/Broadcast Acre)	10 – 14 days ³
	Highly Retentive Film⁴ 175-250 lbs/Broadcast Acre 11.6 – 16.6 gal/Broadcast Acre	14 – 21 days when using highly retentive film

NOTE:

- ¹ For fields infested with Nutsedge and Malva, apply a minimum of 450 lbs/broadcast acre (29.8 gal/acre) of MIDAS 33:67 with standard film and 250 lbs/broadcast acre (16.6 gal/acre) with highly retentive film .
- ² If tarps are cut for removal before planting, aerate a minimum of 2 hours after tarps are cut before removing tarps. Wait at least 5 days after application before cutting standard tarps. Wait at least 10 days after application before cutting highly retentive films.
- ³ Use the longer planting restriction period under conditions of high soil moisture, heavy soils, or rain.
- ⁴ Contact your Arysta LifeScience representative for approved films and rate reduction recommendations.

Field Rate Modifier Table for Raised Bed Applications

Row Spacing (inches)	Bed Width (inches)	Field Rate Modifier
72	40	0.55
72	36	0.50
72	32	0.44
72	30	0.42
72	28	0.39
66	32	0.48
66	30	0.45
66	28	0.42
66	24	0.36
60	30	0.50
60	28	0.47
48	28	0.58

BROADCAST / FLAT FUME APPLICATION

- Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of 6 to 15 inches below the soil surface.
 - **Soil sealing at time of application:** The treated ground must be sealed using closing shoes, roller, compaction roller, cultipacker or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarp being laid down (with fumigant injection) by tarp-laying equipment mounted on the application tractor.
- Planting shall not occur for at least 10 days after application.
- This product may be applied by broadcast/flat fume application with standard tarps at rates in the following table:

APPLICATION RATES FOR BROADCAST / FLAT FUME FUMIGATION WITH STANDARD TARPS		
Crop	MIDAS 33:67 Per Acre¹	Time Between Application and Planting²
Field-Grown Ornamentals Peppers Strawberries Tomatoes Turf	300 – 520 lbs/Acre (19.9 – 34.4 gal/Acre)	10 – 14 days
Stone Fruits (Apricot, Sweet Cherry, Tart Cherry, Nectarine, Peach, Plum, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot, Fresh Prune) Tree Nuts (Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (Hazelnut), Hickory Nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Black Walnut, English Walnut) Vines (Table, Raisin and Wine Grape)	360- 520 lbs/Acre (23.8 – 34.4 gal/Acre)	10 – 14 days
Nurseries (including strawberries, stone fruits, tree nuts and conifer trees)	520 lbs/Acre (34.4 gal/Acre)	10 – 14 days
NOTE: ¹ For fields infested with Nutsedge and Malva apply a minimum of 300 lbs/acre (19.9 gal/acre) of MIDAS 33:67. ² Wait at least 5 days after application before cutting tarps. Aerate a minimum of 2 hours after tarps are cut before removing tarps. Use the longer planting interval under conditions of high soil moisture, heavy soils, or rain.		

Application Rates for Broadcast/Flat Fume Fumigation with Highly Retentive Films

Contact your Arysta LifeScience North America representative for information on approved films and rate reduction recommendations. Applications using highly retentive film shall not exceed 300 lbs/Acre (19.9 gal/Acre).

Cutting and Removal of Highly Retentive Films for Broadcast/Flat Fume Applications

- Do not cut highly retentive films until at least 10 days following the application. Wait a minimum of 14 days after application before planting.
- When tarps are removed from the field, removal shall begin no sooner than 2 hours after tarp cutting has been completed (a task which cannot occur until a minimum of 10 days after application, as stated above).
- Planting shall not occur for at least 14 days after application.

PREPLANT DEEP INJECTION AUGER-PROBE APPLICATION

MANDATORY GOOD AGRICULTURAL PRACTICES (GAPS)

This application method is used when MIDAS 50:50 is applied to individual tree sites in an existing orchard where shank or drip applications are not possible.

In addition to the GAPS required for all MIDAS 50:50 soil fumigation applications, the following GAPS apply for MIDAS preplant deep injection auger-probe applications:

Site Preparation

- Each individual site must remove the stump and primary root system with a back-hoe or other similar equipment, for example an auger.
- The hole must be backfilled with soil before application.

Application Depth

- The fumigant must be injected at least 18 inches into the soil.

System Flush

- Before removing the application wand from the soil the wand must be cleared using nitrogen or compressed air.

Soil Sealing

- After the wand is cleared and removed from the soil, the injection hole must be either covered with soil and tamped; or the soil must be compacted over the injection hole.

For Stone Fruit Trees, Tree Nuts, Vines, and Field Grown Ornamental Trees and Shrubs, use 2 lbs of MIDAS 33:67 per injection site. Use 1 injection site per 100 square feet (ie, one injection site every 10 feet in a standard grid pattern). Planting or replanting of Stone Fruit Trees, Tree Nuts, Vines, and Field-Grown Ornamental Trees and Shrubs may begin 14 days after treatment. DO NOT PLANT if the odor of chloropicrin is detectable.

Do not treat trees, shrubs, or vines with more than 175 lbs ai per acre of iodomethane and 350 lbs ai per acre of chloropicrin.

Buffer Zones

- 25 feet if the application rate is less than 150 lbs MIDAS 33:67 per acre.
- 50 feet if application rate is 150 to 379 lbs MIDAS 33:67 per acre, and
- 100 feet if the application rate is 380 to 520 lbs MIDAS 33:67 per acre.

ROTATIONAL CROPS

Food crops other than strawberry, tomatoes, and peppers require a 4 month plant back rotation restriction from the date of fumigant application. Crop rotation to non-food crops or non-bearing fruit or nut trees is not restricted.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store in a dry, cool, well-ventilated area under lock and key. When appropriate to prevent tipping, store cylinders upright, secured to a rack or wall. Post as a pesticide storage area.

Handling: Product cylinders shall not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging or sliding. Do not use rope slings, hooks, tongs, or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured.

Do not remove valve protection bonnet and safety cap until immediately before use. When cylinder is not in use, close valve by turning clockwise until hand tight, screw safety cap onto valve outlet, and replace protection bonnet.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Return of Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

This pesticide container, whether full or partially used, is the property of the manufacturer or distributor where it was purchased and must be returned to the distributor of origin. Do not ship containers without safety caps or valve protection bonnets. Containers shall never be refilled by the consumer or used for any other product or purpose.

FOR 24-HOUR CHEMICAL EMERGENCY (spill, leak, fire or accident) ASSISTANCE:
Call CHEMTREC at 1-800-424-9300

Warranty and Disclaimer Statement

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America, LLC ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF ARYSTA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF ARYSTA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT ARYSTA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.

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Arysta LifeScience and the Arysta LifeScience logo are registered trademarks of Arysta LifeScience, LLC

Material to be added to an e-Jacket/Jacket

Reg. No. 66330-59

Description: Label Amendment Samuel Stange 11-3-09

1. ☐ Placement within the e-Jacket/jacket:

☐ Default: (chronological, top = newest)

☐ File Location: (PDF page number, i.e., "before page 45")

2. ☒ Send to Data Extraction contractors this material:

☒ Newly stamped accepted label

☐ Notification

☐ New CSF

☐ Other: _____

3. Attach this coversheet to the top of the material or jacket. It must be well organized and clipped together, NOT STAPLED. Then give the material with this coversheet to staff in the Information Services Center (Room S-4900).

Reviewer's Name: Samuel Gibson

Phone: 305-9096 Division: RD

Date: _____



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Alex Hawkins, Jr., Ph.D
Regulatory Manager
Aryta LifeScience North America, LLC
15401 Weston Parkway, Suite 150
Cary, NC 27513

SEP 01 2009

Dear Mr. Hawkins,

Subject: Iodomethane Risk Mitigation Requirements

As a condition of registration for all products containing iodomethane, you are required to satisfy any additional risk mitigation required for the older soil fumigants and required to amend your labels in the same timeframe imposed on the other soil fumigant registrants. In the Agency correspondence letters dated August 18th and August 27th, all soil fumigant registrants were informed of the 2010 label mitigation requirements. Your company is in receipt of the letters and label table that were sent to the chloropicrin registrants since your products also contain this active ingredient. Please submit these labels according to the guidance provided by Richard Keigwin's August 18, 2009 and August 27, 2009 letters.

Sincerely,

Mary L. Waller
Product Manager (21)
Fungicide Branch,
Registration Division (7505P)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

November 3, 2009

W.A. Hawkins, Jr., Ph.D.
Regulatory Manager
Arysta LifeScience, North America, LLC
15401 Weston Parkway, Suite 150
Cary, NC 27513

Subject: Midas 33:67
EPA Reg. No. 66330-59
Your amendment dated June 16, 2009
Decision No. 416498

Dear Dr. Hawkins:

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended is acceptable provided the following changes are made:

"Florida Only" and "States Other than Florida" Labels

1. On page 3 under Personal Protective Equipment, revise the sentence "Applicators and other handlers to include. . ." to read "Applicators and other handlers to include (tarp monitors and drip applicators) present on the application site or within the buffer. . ."
2. Move the Agricultural Use Requirements box which currently appears on page 7 to page 4 so that it precedes the Buffer Zone section.
3. On page 9, first bullet, add a period to the last sentence of this section.
4. On page 11 in the table, revise the fourth footnote to read "Contact your Arysta LifeScience representative for approved films and rate reduction recommendations."
5. On page 12 under Broadcast/Flat Fume Application, last bullet, change the word "films" to "tarps"
6. On page 12, revise the sentence "Contact your Arysta LifeScience North America. . ." to read "Contact your Arysta LifeScience North America representative for information on approved films and rate reduction recommendations."

7. On page 13, revise the rotational crop statement to read "Food crops other than strawberry, tomatoes, and peppers require a 4 month plant back rotation restriction from the date of fumigant application. Crop rotation to non-food crops or non-bearing fruit or nut trees is not restricted."
8. On page 13 in the Storage and Disposal section, Return of Containers: Refillable container, revise the last sentence to read "Containers shall never be refilled by the consumer or used for any other product or purpose."

One copy of the label stamped "Accepted with comments" is enclosed for your records. Please submit one copy of the final printed label before the product is released for shipment. If you have any questions, you may reach me at (703) 308-9354 or via email at waller.mary@epa.gov.

Sincerely,



Mary L. Waller
Product Manager 21
Fungicide Branch
Registration Division (7505P)

Enclosure

NOV 03 2009

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
66-330-59

**RESTRICTED USE PESTICIDE
DUE TO ACUTE TOXICITY**

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

MIDAS® 33:67

FOR SALE AND USE IN FLORIDA ONLY

Only For Pre-Plant Fumigations of Fields Intended for Commercial Production of Listed Crops and Field-Grown Ornamentals, for the Control of Soil-Borne Pests Including Weed Seeds, Nematodes, Insects, and Diseases.

ACTIVE INGREDIENTS:

Iodomethane.....32.93%

Chloropicrin66.67%

OTHER INGREDIENTS:0.40%

TOTAL:.....100.00%

One gallon weighs 15.1 pounds (5 pounds Iodomethane and 10.1 pounds Chloropicrin).

**KEEP OUT OF REACH OF CHILDREN
DANGER / PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail).

FIRST AID	
If in eyes	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing.• Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible.• Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything to an unconscious person.
HOT LINE NUMBERS	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL:	
1-866-303-6952 or 1-651-632-8946	
NOTE TO PHYSICIAN	
Probable mucosal damage may contraindicate the use of gastric lavage. Symptoms of overexposure may include irritation to eyes, skin, and respiratory system, shortness of breath, nausea, vomiting, dizziness, ataxia, slurred speech, drowsiness, blurred vision, staggering gait and mental imbalance, with probable recovery after period of no exposure. Treatment is symptomatic.	

EPA Reg. No. 66330-59
EPA Est. No.

For Product Information Call: 1-866-761-9397

Net Contents: _____ LBS.

Manufactured for
Arysta LifeScience North America, LLC
15401 Weston Parkway, Suite 150
Cary, NC 27513

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

Danger. Corrosive. Causes irreversible eye damage. Corrosive to skin. Causes skin burns. May be fatal if inhaled or swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin or on clothing. Do not breathe vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SPECIAL NOTE: This product contains chloropicrin, a poisonous liquid or vapor. Inhalation of vapors may be fatal. Chloropicrin is readily identified by smell. Exposure to very low concentrations of vapor will cause irritation of eyes, nose and throat. Continued exposure after irritation is evident or higher concentrations may cause painful irritation to the eyes or temporary blindness. Liquid will cause chemical burns to skin or eyes. Do not get on skin, in eyes, or on clothing. Chloropicrin fumigant has the capacity to cause marked irritation to the upper respiratory tract and is a strong lachrymator (tear producing eye irritant). Low concentrations, below those necessary to cause serious systemic intoxication, are capable of causing severely painful eye irritation, hence will not be voluntarily tolerated. However, the effect may be so powerful that a person may become temporarily blinded and panic-stricken and that in turn may lead to accidents.

AIR CONCENTRATION LEVEL

Air concentrations of chloropicrin are measured with direct reading colorimetric detector devices, such as Kitagawa tubes, certified for chloropicrin at 0.1 to 16 ppm. Persons involved in the application of MIDAS 33:67 or in reentry into treated fields must wear an air-purifying respirator when required by the restrictions given in the PERSONAL PROTECTIVE EQUIPMENT and AGRICULTURAL USE REQUIREMENTS sections below. In case of spills or leaks, additional respiratory protection must be worn as detailed under Spill and Leak Procedures.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers (to include tractor drivers, co-pilots, shovelers, cross ditchers, and tarp monitors present on the application site and within the buffer zone (see exception for transient travel under heading "Buffer Zone") **must wear**:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- An air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C).
- Full face shield or safety glasses with brow, temple and side protection if the air concentration of chloropicrin is less than 0.1 ppm. If the air concentration of chloropicrin is greater than 0.1 ppm but less than 4 ppm, wear a full face respirator or face-sealing goggles with a half-face respirator. If the chloropicrin concentration is greater than 4ppm, then see below.
- A full face respirator of one of the following types if the air concentration of chloropicrin **exceeds 4 ppm**: (a) a supplied-air respirator (MSHA/NIOSH approval number prefix TC-19C) OR (b) a self-contained breathing apparatus (SCBA) (MSHA/NIOSH approval number prefix TC-13F).

Other handlers (to include planters, hole punchers, tarp cutters, tarp removers, and tarp remover drivers present on the application site from the start of the application until 14 days following the end of the application; and within the buffer zone from the start of the application until 48 hours following the end of the application (see exception for transient travel under heading "Buffer Zone") **must wear**:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection. **DO NOT** wear goggles (except where otherwise required by this label).

ENGINEERING CONTROL REQUIREMENTS

MIDAS 33:67 must be transferred through connecting hoses, pipes, and/or couplings sufficiently tight to prevent workers or other persons from coming in contact with the liquid.

- All hoses, piping, and tanks used in connection with this product shall be of a type appropriate for use under the pressure and vacuum conditions to be encountered.
- Hoses between any fumigant container and the flow divider must be Teflon® hoses reinforced with stainless steel wire braid or its equivalent.
- External sight gauges, if applicable, shall be equipped with valves so that pipes to sight gauge can be shut off in case of breakage or leakage.
- The mechanical transfer system must be adequate to make necessary measurements of the pesticide being used.
- Shut-off devices must be installed on the exit end of all cylinder connections and at all disconnect points to prevent leakage of product when the transfer is stopped and hose is removed or disconnected.
- The pressure in hoses used to move the product must not exceed the manufacturer's maximum pressure specifications.
- Check equipment to ensure good condition and integrity prior to each use.

User Safety Requirements

- Do not wear jewelry, gloves, goggles (except where otherwise required by this label), tight clothing or any rubber protective clothing/boots that can trap iodomethane or chloropicrin vapors against your skin. Iodomethane and chloropicrin vapors can be trapped inside clothing and cause skin injury.
- Remove all clothing that comes in contact with liquid material at once.
- Aerate all affected clothing thoroughly outdoor prior to washing with hot water and detergent.

- Discard any clothing or absorbent materials (e.g. leather), that have been drenched or heavily contaminated with this product. Do not reuse them.
- Respirator Requirements: When a respirator is required for use with this product, the following criteria must be met consistent with the Worker Protection Standard: (a) Cartridges or canisters must be replaced when odor or irritation from this product becomes apparent, or after 8 hours of use, whichever is sooner; (b) Respirators must be fit-tested and fit-checked using a program that conforms to OSHA's requirements (described in 29 CFR Part 1910.134); (c) Respirator users must be trained using a program that conforms to OSHA's requirements (described in 29 CFR Part 1910.134); (d) Respirator users must be examined by a qualified medical practitioner to ensure physical ability to safely wear the style of respirator to be worn.
- Follow PPE manufacturer's instructions for cleaning/maintaining protective eyewear and respirators.

USER SAFETY RECOMMENDATIONS

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside, then wash skin thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters. Iodomethane has certain properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

To address this concern for ground water quality, for broadcast applications, tarps must be sliced or removed before noon and only when rainfall is not expected within 12 hours. (Falling temperatures typically found in the late afternoon and evening will not promote dissipation of remaining Iodomethane under the sliced tarp and rainfall may cause remaining Iodomethane under the sliced tarp to leach into ground water.) For raised bed applications, rainfall is not a factor since planting occurs with the tarp in place and slicing or removing of tarps occurs after Iodomethane has dissipated.

See the GENERAL USE PRECAUTIONS; PROCEDURES PRIOR TO, DURING AND AFTER ALL APPLICATIONS; and the MIDAS 33:67 PRE-PLANT FIELD FUMIGATION METHODS sections for additional precautions and directions regarding tarp removal.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat, open flames, or sparking electrical equipment. Do not use application devices containing natural rubber, aluminum, magnesium or their alloys.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only Certified Applicators (certified by the state and trained by Arysta) in the proper handling, worker protection, and application of MIDAS 33:67 soil fumigant and handlers under their direct supervision may be present in the treatment area during application. An Arysta trained and state Certified Applicator must be on site and within the line of sight to observe handlers during the application. Handling tasks to be

performed under the direct supervision of a Certified Applicator include, but are not limited to the tractor driver, co-pilot, tarp dispenser and shoveler. All such handlers must have appropriate protective equipment, as described in the PERSONAL PROTECTIVE EQUIPMENT section. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Buffer Zone

The area adjacent to the treated area is referred to as the buffer zone. The buffer zone shall extend from the edge of the treated area in all directions. See Buffer Zone Table. The minimum buffer zone distance shall be 25 feet.

The Certified Applicator supervising the soil fumigation is responsible for the following:

1. Calculating the appropriate size of the buffer zone that must be maintained from the start of the application until 48 hours following the end of the application;
2. Establishing and maintaining the buffer zone from the start of the application until 48 hours following the end of the application. Buffer zones must be on the property under the control of the Certified Applicator and must not include property that is not under the control of the Certified Applicator unless written permission is obtained prior to fumigation, including signature, from responsible parties from all properties that will be included or partially included in the buffer zone. Buffer zones shall not extend onto public roads or areas, or onto any other land for which written consent is not attainable. The Certified Applicator must use an appropriate means to manage and maintain the buffer zone such as posting fumigant warning signs around the perimeter of the buffer zone at potential points of entry, using trained workers to patrol the buffer zone, or other equivalent means. If fumigant warning signs are used, they must be posted from the start of the application until 48 hours following the end of the application and they must include the same warning symbol and statements required for notification warning signs under AGRICULTURAL USE REQUIREMENTS with the exception that signs will indicate "Fumigant Buffer Zone" at the top of the sign and will delete the statement "areas under fumigation". If "Fumigant Buffer Zone" signs are used, the signs must be removed within 3 days of the end of the buffer zone period.
3. Ensuring that unprotected workers and bystanders do not enter the buffer zone from the start of the application until 48 hours following the end of the application. Exception: Unprotected workers and bystanders may travel through (but not engage in any activity in) the buffer zone during the application and the 48-hour period following the end of the application, provided their total exposure time in any 24-hour period is 15 minutes or less. However, travel by unprotected workers or bystanders through the fumigated area itself is prohibited during the entire 5-day Entry Restricted period. Handlers protected with required Personal Protective Equipment (PPE) may work in buffer zones. See the PERSONAL PROTECTIVE EQUIPMENT section.
4. Ensuring application site has a distinctive buffer zone. The buffer zone of the field to be treated cannot overlap the buffer zone of another field treated within the last 48 hours.
5. Ensuring that there are no occupied nursing homes, hospitals, or prisons; and no occupied licensed schools, licensed day care facilities and licensed assisted living facilities (licensed by state or local governments) within ¼ mile of the fumigated area during the buffer zone period.
6. Documenting how the buffer zone was determined, and providing the information specified below concerning occupied structures within the buffer zone; and nursing homes, hospitals, or prisons; or licensed schools, licensed day care facilities, or licensed assisted living facilities (licensed by state or local governments) within ¼ mile of the fumigated area. Records must include buffer zone calculations; diagrams; maps; and the dates and times people left occupied structures within the buffer zone; and when they were allowed to return to such structures. Records must include any consent documentation signed by parties whose properties were outside the control of the Certified Applicator but were included in the buffer zone. Records must also identify nursing homes, hospitals, or prisons; or licensed schools, licensed day care facilities, or licensed assisted living facilities (licensed by state or local governments) within ¼ mile of the fumigation area, and document how it was determined that such sites would be unoccupied during the application period. These records must be maintained by the Certified Applicator and by the owner/operator of the fumigated site for at least two years following the fumigation and must be made available, upon request to Federal, State, Tribal, and local enforcement personnel.

Determining Buffer Zone Distance

- Determine the size of the buffer zone using the following Buffer Zone Table.
- The size of the buffer zone will be dependant on the following three factors:
 - The number of field acres that are being treated with MIDAS 33:67.
 - The pounds of MIDAS 33:67 that are being applied per treated acre.
 - Buffer zone reduction credits.

Buffer Zone Table

MIDAS 33:67 Application Rate (Lbs per Treated Acre) ⁴	SIZE OF FIELD IN ACRES (Buffer zone distance in feet) ^{1,2}							
	Up to 5 Acres	6 – 10 Acres	11-15 Acres	16- 20 Acres	21-25 Acres	26-30 Acres	31-35 Acres	36-40 ³ Acres
100	25	25	45	60	70	80	90	95
150	25	30	60	85	100	115	130	145
175	25	35	70	100	120	135	150	165
200	25	40	80	115	135	155	175	190
250	25	50	95	140	165	190	215	235
300	30	60	115	170	200	230	260	285
350	35	70	135	200	235	265	300	330
360	35	70	140	205	240	275	310	340
400	40	75	150	225	265	305	345	380
500	50	95	190	285	335	380	430	475
530	50	100	200	300	350	400	450	500

1. For rates not listed on this table, use the buffer zone for the next highest rate, or use the following calculation to determine the exact buffer zone:

$$\text{Buffer Zone for Application Rate Not Listed} = \frac{\text{Known Buffer Zone on Table} \times \text{Application Rate Not Listed}}{\text{Rate of Application for Known Buffer Zone}}$$

2. Buffer Zone Reduction Credits:

Reduce buffer zone by 10% for each factor listed below:

- Use of flat fume / broadcast application
- Use of highly retentive films. Highly retentive films for which credit can be applied must be on an Arysta approved list. Examples of Arysta approved films are Can slit Brand Metalized 1.3 ml, Pliant Blockade® VIF 1.25 ml, or Pliant Metalized 1.0-1.25.
- Application to soils having >3% organic matter Refer to the USDA or USGS Soil Survey Maps for the treated area that identify the range of organic matter and / or a documented soil survey report that lists range of % organic matter for the treated area. Collection of samples for analysis of soil in the treated area should follow procedures as per USDA's Natural Resource Conservation Services methods. Information on soil sampling can be found at www.soil.usda.gov.

For example, if the Buffer Zone is 50 feet and the application qualifies for a buffer zone reduction credit such as use of highly retentive film, then the buffer zone can be reduced by 10%, i.e. reduced by 5 feet based on the following calculation: 50 ft – (50 ft X 10%) = 45 feet.

If the application qualifies for two buffer zone reduction credits such as use of highly retentive film and soil with >3% organic matter, then the buffer zone can be reduced by 20%, i.e. reduced by 10 feet based on the following calculation: 50 ft – (50 ft X 20%) = 40 feet.

3. Applications are limited to 40 contiguous acres or less per day.
4. For raised bed applications, the treated area is the raised bed not the untreated furrows. As an example, if a raised bed field is 50% raised bed (treated) and 50% furrow (untreated), and 350 lbs of MIDAS 33:67 is applied to the raised beds of the field, then the effective application rate to the treated raised bed is 350 lbs per treated acre; and that is the rate that would determine the buffer zone.

Note: Minimum allowable buffer zone is 25 feet regardless of buffer zone reduction credits.

Buffer Zone for Pre-Plant Deep Injection Auger

- 25 feet if the application rate is less than 150 lbs MIDAS 33:67 per acre.
- 50 feet if application rate is 150 to 379 lbs MIDAS 33:67 per acre, and
- 100 feet if the application rate is 380 to 530 lbs MIDAS 33:67 per acre.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), restricted entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

Entry Restrictions

Entry into the treated area (including early entry that would otherwise be permitted under the WPS) by any person, other than a correctly trained and equipped handler who is performing a task that is permitted by this labeling, is PROHIBITED from the start of the application until 5 days after application and the air concentration of chloropicrin is measured to be less than 0.1 ppm. Entry during the 5-day restricted entry period is limited to the handler activities of tarp inspection, tarp repair, and flood prevention (including cross ditching).

See the Buffer Zone section for additional Entry Restrictions.

Notification at Entrances to Treated Areas

Notify all workers of the fumigation verbally and by posting warning signs at all likely entrances to the treated area for no less than 5 days after application. The signs must bear the skull and crossbones symbol and state:

- (1) "DANGER/PELIGRO"
- (2) "Areas under fumigation, DO NOT ENTER/NO ENTRE"
- (3) Iodomethane and Chloropicrin Fumigants In Use
- (4) Date and time of fumigation
- (5) MIDAS 33:67
- (6) Name, address, and telephone number of the Certified Applicator in charge of the application.

Post these fumigant warning signs for treated areas instead of the WPS signs for these applications but follow all WPS requirements pertaining to location, legibility, size and timing of posting and removal.

PPE for Reentry during the Entry-Restricted Period

The PPE required for reentry during the entry-restricted period are:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- An air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C).
- Full face shield or safety glasses with brow, temple and side protection if the air concentration of chloropicrin is less than 0.1 ppm. If the air concentration of chloropicrin is greater than 0.1 ppm, but less than 4 ppm, wear a full face respirator or face-sealing goggles with a half-face respirator. If the chloropicrin concentration is greater than 4 ppm, then see below.
- A full face respirator of one of the following types **if the air concentration of chloropicrin exceeds 4 PPM:** (a) a supplied-air respirator (MSHA/NIOSH approval number prefix TC-19C) OR (b) a self-contained breathing apparatus (SCBA) (MSHA/NIOSH approval number prefix TC-13F).

GENERAL INFORMATION AND INSTRUCTIONS

This fumigant is a highly hazardous material. All uses of this fumigant are covered under the Worker Protection Standard, and must be conducted in accordance with all of the requirements of the Worker Protection Standard (40 CFR Part 170). It is a restricted use pesticide that must only be used by Certified Applicators, certified by the state and trained by Arysta, in the proper handling, worker protection, and application of MIDAS 33:67 soil fumigant and handlers under their direct supervision. Before using, read the entire label and follow all use directions and precautions. All persons working with this fumigant must be knowledgeable about the hazards and trained in the use of required air-purifying respirator equipment and detector devices, emergency procedures and proper use of the fumigant.

GENERAL USE PRECAUTIONS

- Follow all local government instructions for posting of treated areas and post all treated areas with warning signs.
- Comply with all local ordinances and regulations.
- Do not apply within ¼ mile of nursing homes, hospitals or prisons; or licensed schools, licensed day care facilities or licensed assisted living facilities (licensed by state or local governments) that will be occupied during the buffer zone period.
- Applications are limited to 40 contiguous acres or less per day.
- Do not apply this product in the presence of ground fog, inversion layers or when the potential for an inversion layer is likely to occur as this may result in product drift outside the treated area. A smoke generator can be used to indicate the presence of an inversion layer if the smoke column does not rise in a vertical pattern. In addition, consult the local weather forecast in the surrounding region for reports of expected inversion layers the day of application and within the 24 hour period following applications of MIDAS 33:67.
- Never fumigate alone. A minimum of two persons must be present during handling and application of soil fumigants. These persons must be Certified Applicators or handlers under the direct supervision and within the line of sight of a Certified Applicator.
- Certified Applicators are responsible for providing information to all handlers involved with the fumigation about precautions and procedures in the safe handling, worker protection and application of MIDAS 33:67 for soil fumigation.
- Additional instructions must be made available to handlers in the mechanical operation of the tractor and how to safely work with the operator while fumigating.
- Always handle this product in the open, with all handlers positioned "upwind" from the container and/or where there is adequate ventilation.
- Check the fumigation system for leaks or worn out equipment prior to soil injection.
- When fumigating from a tractor, it is required that 5 gallons of water be carried on the tractor and readily available for rinsing and cleaning purposes. An additional 5 gallons of water must be available in the service truck. This water must be potable and in containers marked "Decontamination water not to be used for drinking."
- For broadcast/flat fume applications, keep all pets, livestock and other domestic animals out of the treated areas until tarps have been removed.
- For raised bed applications, keep all pets, livestock and other domestic animals out of the treated areas for 5 days and until the air concentration for chloropicrin is less than 0.1 ppm at the edge of the treated area. Most raised bed applications will not result in tarp removal.
- Tarp removal within 14 days of the start of the application requires a minimum of two trained employees to be present during the operation. Non-handler personnel are prohibited from being present during tarp removal.
- See AGRICULTURAL USE REQUIREMENTS box for details regarding posting and placement of warning signs.

- Do not allow entry by unprotected persons into the fumigated area until the re-entry signs are removed. Such signs must only be removed when the air concentration of chloropicrin is measured to be less than 0.1 ppm at the edge of the treated area and no sooner than 5 days following application. Signs must remain legible during entire posting period
- Do not cut standard tarps for planting until the air concentration of chloropicrin is measured to be less than 0.1 ppm at the edge of the treated area and no sooner than 5 days following application. In the case of applications using highly retentive films, do not cut tarps until the air concentration of chloropicrin is measured to be less than 0.1 ppm at the edge of the treated area and no sooner than 10 days following application.
- To determine whether aeration is complete, each fumigated site must be tested and shown to contain less than 0.1 ppm chloropicrin in the air space around the treated site as determined by 3 consecutive measurements taken at the down wind edge of the treated site at least 15 minutes apart.

SPILL AND LEAK PROCEDURES

- Cease all operations if any leak develops in the fumigation system.
- Evacuate everyone from the immediate areas of the spill or leak.
- Approach the area from the upwind side. Work upwind to repair leak(s), if possible.
- For entry into the area to correct the problem, trained personnel must wear loose fitting or well ventilated long-sleeved shirt and long pants, shoes plus socks and either (a) a supplied-air respirator (MSHA/NIOSH approval number prefix TC-19C) or (b) a self-contained breathing apparatus (SCBA)(MSHA/NIOSH approval number prefix TC-13F).
- Only correctly trained and PPE-equipped handlers are permitted to enter. Do not permit entry into the spill or leak area by any other person until the concentration of chloropicrin is measured to be less than 0.1 ppm as specified in section above.
- Allow spilled fumigant to evaporate or to absorb onto vermiculite, dry sand, earth, or similar absorbent material. Such material should be disposed of on site or at an approved disposal facility.
- Contaminated soil, water and other cleanup debris may be hazardous waste. Report any spill that exceeds 302 lbs (20 gallons of product) to the National Response Center at 1-800-424-8802.

PROCEDURES PRIOR TO, DURING AND AFTER ALL APPLICATIONS

CONTROL OF SOIL BORNE PESTS: MIDAS 33:67 controls soil-borne pests including nematodes, insects, weed seeds, and diseases.

Midas 33:67 will control the following pests when present in soil at the time of treatment:

Weed Seeds, including broadleaf weeds such as nutsedge, pigweed, broomrape and lambsquarters, and grasses such as bermudagrass, and annual bluegrass. Effectiveness against hard seed weeds, such as mallow, dodder, morning glory, and certain leguminous weeds may be variable.

Plant-parasitic Nematodes, such as root-knot, root lesion (meadow), cyst, citrus, burrowing, false root-knot, lance, spiral, ring, sting, stubby root, dagger, awl, sheath and stung (stylet) nematodes.

Soil-borne Insects, such as wireworms, cutworms, grubs, rootworms, ants and garden symphylans.

Soil-borne Diseases, such as *Verticillium*, *Pythium*, *Rhizoctonia*, *Phytophthora*, and *Fusarium*.

MIDAS 33:67 is not to be used as a preventative treatment for pests that may be introduced after the fumigant has been applied and/or tarps removed. To reduce the potential for the re-introduction of pests (nematodes, weed seed and disease); avoid the use of irrigation water, transplants or equipment that could carry pests into the planting area. Avoid moving infested soil back into the treated area through cultivation or other means.

Soil Preparation: The soil should be worked to the depth that is desirable for the fumigant to penetrate. Plant refuse should be worked into the soil and allowed enough time to decompose prior to treatment. Little or no plant refuse should be present on soil surface. Prior to application, the soil must be sufficiently moistened to allow seeds to swell (imbibe) in preparation for germination.

Prior to All Applications:

- Ensure that application equipment does not contain components made of natural rubber, aluminum, magnesium or their alloys.
- Soil in treatment area should be reasonably free of trash and in good tilth prior to soil treatment.
- Do not apply when soils are too wet or too dry for good agricultural practices or too hot or too cold (<55°F; or >90°F at a depth of 8 inches).

During All Applications:

- Immediately cover treated areas with a plastic tarpaulin for a minimum of 5 days.
- Allow time for complete voiding of material in the buried shanks following closure of the shutoff valve and before removing shanks from the soil.
- In the event that trash is pulled up with the shanks after completing a treatment pass, the trash must be covered with plastic film and the edges of the film buried under at least 4 inches of compacted soil before making the next pass through the field.
- Do not change cylinders when the fumigant system is under pressure. Change cylinders with all cylinder valves in the off position.

Following All Applications:

- To minimize the potential for crop injury, allow the fumigant to dissipate before planting a crop. Seeds may be used as a bioassay to determine if MIDAS 33:67 is present in the soil at concentrations sufficient to cause plant injury. See fumigation tables for planting requirements specific to the different application methods.
- Fumigation of highly acidic soils or those high in organic matter can cause ammonia toxicity to plants and or elevated levels of soluble salts in the soil causing phytotoxicity. Analyze soil following fumigation and fertilize as indicated. Avoid those fertilizers using ammonium salts.
- For broadcast applications, tarps must be sliced or removed before noon and only when rainfall is not expected within 12 hours. (Falling temperatures typically found in the late afternoon and evening will not promote dissipation of remaining Iodomethane under the sliced tarp and rainfall may cause remaining Iodomethane under the sliced tarp to leach into ground water.) For raised bed applications, rainfall is not a factor since planting occurs with the tarp in place and slicing or removing of tarps occurs after Iodomethane has dissipated.

MIDAS 33:67 PRE-PLANT FIELD FUMIGATION METHODS

Fumigation with MIDAS 33:67 shall only be performed in accordance with the following three application techniques: 1) Raised Bed Application, 2) Broadcast/Flat Fume Application, or 3) Deep Injection Auger Probe Application (stone fruit, nut trees, vines, and field-grown ornamentals only). Application methods and rates of application for each of these methods are discussed in detail below.

RAISED BED APPLICATION

- Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of no less than 6 inches below the soil surface. The treated ground must be sealed using either:
 - Soil sealing at the time of application: The treated ground must be sealed using closing shoes, roller, compaction roller, cultipacker, or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarpaulin being laid down (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor; or

- **Bed shaper:** The chisels shall be placed with the injection point under the bed shaper, and the tarpaulin shall be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor; or
- **Combination bed former and bed shaper:** The chisels shall be placed between the bed former and the bed shaper. The tractor with the tarpaulin-laying equipment shall immediately follow the application tractor.
- Injection depth of between 6 and 15 inches. The injection depth in preformed beds must not be below the bed furrow.
- Injection spacing of 12 inches or less typically performed with a multiple shank applicator.
- Planting shall not occur for at least 10 days after application (refer to RAISED BED SOIL FUMIGATION TABLE below).

Application Rates for Raised Bed Fumigation: Rates in the table below are given in pounds of MIDAS 33:67 per broadcast acre. The amount of product applied will be proportionate to the row spacing and width of the raised bed. To calculate the amount of product to be applied, multiply the application rate in lbs MIDAS 33:67/broadcast acre by the appropriate modifier from the Field Rate Modifier Table provided below.

RAISED BED SOIL FUMIGATION TABLE		
Crop	MIDAS 33:67 Per Broadcast Acre ¹	Time Between ² Application and Planting
Field-Grown Ornamentals Peppers Strawberries Tomatoes	Standard Tarp 300 - 530 lbs/Broadcast Acre (19.9 – 35.1 gal/Broadcast Acre)	10 – 14 days ³
	Highly Retentive Film⁴ 175-250 lbs/Broadcast Acre 11.6 – 16.6 gal/Broadcast Acre	14 – 21 days when using highly retentive film
NOTE: ¹ For fields infested with Nutsedge and Malva, apply a minimum of 450 lbs/broadcast acre (29.8 gal/acre) of MIDAS 33:67 with standard film and 250 lbs/broadcast acre (16.6 gal/acre) with highly retentive film. ² If tarps are cut for removal before planting, aerate a minimum of 24 hours after tarps are cut before removing tarps. Wait at least 5 days after application before cutting standard tarps. Wait at least 10 days after application before cutting highly retentive films. ³ Use the longer planting restriction period under conditions of high soil moisture, heavy soils, or rain. ⁴ Contact your Arysta LifeScience representative for film selection and rate reduction recommendations and approved films.		

Field Rate Modifier Table for Raised Bed Applications

Row Spacing (inches)	Bed Width (inches)	Field Rate Modifier
72	40	0.55
72	36	0.50
72	32	0.44
72	30	0.42
72	28	0.39
66	32	0.48
66	30	0.45
66	28	0.42
66	24	0.36
60	30	0.50
60	28	0.47
48	28	0.58

BROADCAST / FLAT FUME APPLICATION

- Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of 6 to 15 inches below the soil surface.
 - **Soil sealing at time of application:** The treated ground must be sealed using closing shoes, roller, compaction roller, cultipacker or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarpaulin being laid down (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor.
- Planting shall not occur for at least 10 days after application.
- This product may be applied by broadcast/flat fume application with standard films at rates in the following table:

APPLICATION RATES FOR BROADCAST / FLAT FUME FUMIGATION WITH STANDARD TARPS		
Crop	MIDAS 33:67 Per Acre¹	Time Between Application and Planting²
Field-Grown Ornamentals Peppers Strawberries Tomatoes Turf	300 – 530 lbs/Acre (19.9 – 35.1 gal/Acre)	10 – 14 days
Stone Fruits (Apricot, Sweet Cherry, Tart Cherry, Nectarine, Peach, Plum, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot, Fresh Prune) Tree Nuts (Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (Hazelnut), Hickory Nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Black Walnut, English Walnut) Vines (Table, Raisin and Wine Grape)	360- 530 lbs/Acre (23.8 – 35.1 gal/Acre)	10 – 14 days
Nurseries (including strawberries, stone fruits, tree nuts and conifer trees)	530 lbs/Acre (35.1 gal/Acre)	10 – 14 days
NOTE: ¹ For fields infested with Nutsedge and Malva apply a minimum of 300 lbs/acre (19.9 gal/acre) of MIDAS 33:67. ² Wait at least 5 days after application before cutting tarps. Aerate a minimum of 24 hours after tarps are cut before removing tarps. Use the longer planting interval under conditions of high soil moisture, heavy soils, or rain.		

Application Rates for Broadcast/Flat Fume Fumigation with Highly Retentive Films

Contact your Arysta LifeScience North America representative for information on film selection and rate reduction recommendations for highly retentive film. Applications using highly retentive film shall not exceed 300 lbs/Acre (19.9 gal/Acre).

Cutting and Removal of Highly Retentive Films for Broadcast/Flat Fume Applications

- Do not cut highly retentive films until at least 10 days following the application. Wait a minimum of 14 days after application before planting.

- When tarpaulins are removed from the field, removal shall begin no sooner than 24 hours after tarpaulin cutting has been completed (a task which cannot occur until a minimum of 10 days after application, as stated above).
- Planting shall not occur for at least 14 days after application.

PREPLANT DEEP INJECTION AUGER-PROBE APPLICATION

For Stone Fruits, Tree Nuts, Vines, and Field Grown Ornamental Trees and Shrubs, use 2 lbs of MIDAS 33:67 per injection site, typically to a depth of between 18 to 36 inches below the soil surface, though deeper injections may be made as appropriate. Use 1 injection site per 100 square feet (i.e., one injection site every 10 feet in a standard grid pattern). Planting or replanting of Stone Fruits, Tree Nuts, Vines, and Field-Grown Ornamental Trees and Shrubs may begin 14 days after treatment. **DO NOT PLANT** if the odor of chloropicrin is detectable.

Do not treat more than 230 trees/shrubs/vines per acre per day.

Buffer Zones

- 25 feet if the application rate is less than 150 lbs MIDAS 33:67 per acre.
- 50 feet if application rate is 150 to 379 lbs MIDAS 33:67 per acre, and
- 100 feet if the application rate is 380 to 530 lbs MIDAS 33:67 per acre.

ROTATIONAL CROPS

There are no crop rotation restrictions.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store in a dry, cool, well-ventilated area under lock and key. When appropriate to prevent tipping, store cylinders upright, secured to a rack or wall. Post as a pesticide storage area.

Handling: Product cylinders shall not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging or sliding. Do not use rope slings, hooks, tongs, or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured.

Do not remove valve protection bonnet and safety cap until immediately before use. When cylinder is not in use, close valve by turning clockwise until hand tight, screw safety cap onto valve outlet, and replace protection bonnet.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Return of Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

This pesticide container, whether full or partially used, is the property of the manufacturer or distributor where it was purchased and must be returned to the distributor of origin. Do not ship containers without safety caps or valve protection bonnets. Containers shall never be refilled by the consumer.

FOR 24-HOUR CHEMICAL EMERGENCY (spill, leak, fire or accident) ASSISTANCE:

Call CHEMTREC at 1-800-424-9300

Warranty and Disclaimer Statement

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America, LLC ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF ARYSTA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.**

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF ARYSTA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT ARYSTA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.

MIDAS® and the Midas logo are registered trademarks of Arysta LifeScience North America, LLC
Arysta LifeScience and the Arysta LifeScience logo are registered trademarks of Arysta LifeScience, LLC

ACCEPTED
RESTRICTED USE PESTICIDE
DUE TO ACUTE TOXICITY
For sale and use only by Certified Applicators or persons under their direct supervision and only in accordance with the Certified Applicator's certification.

137 0 3 2000
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.

MIDAS® 33:67

FOR SALE AND USE IN STATES OTHER THAN FLORIDA

Only For Pre-Plant Fumigations of Fields Intended for Commercial Production of Listed Crops and Field-Grown Ornamentals, for the Control of Soil-Borne Pests Including Weed Seeds, Nematodes, Insects, and Diseases.

ACTIVE INGREDIENTS:

Iodomethane 32.93%

Chloropicrin 66.67%

OTHER INGREDIENTS: 0.40%

TOTAL: 100.00%

One gallon weighs 15.1 pounds (5 pounds Iodomethane and 10.1 pounds Chloropicrin).

KEEP OUT OF REACH OF CHILDREN
DANGER / PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail).

FIRST AID	
If in eyes	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing. Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> Move person to fresh air. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything to an unconscious person.
HOT LINE NUMBERS Have the product container or label with you when calling a poison control center or doctor, or going for treatment. FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL: 1-866-303-6952 or 1-651-632-8946	
NOTE TO PHYSICIAN Probable mucosal damage may contraindicate the use of gastric lavage. Symptoms of overexposure may include irritation to eyes, skin, and respiratory system, shortness of breath, nausea, vomiting, dizziness, ataxia, slurred speech, drowsiness, blurred vision, staggering gait and mental imbalance, with probable recovery after period of no exposure. Treatment is symptomatic.	

EPA Reg. No. 66330-59
EPA Est. No.

For Product Information Call: 1-866-761-9397

Net Contents: _____ LBS.

Manufactured for
Arysta LifeScience North America, LLC
15401 Weston Parkway, Suite 150
Cary, NC 27513

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

Danger. Corrosive. Causes irreversible eye damage. Corrosive to skin. Causes skin burns. May be fatal if inhaled or swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin or on clothing. Do not breathe vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SPECIAL NOTE: This product contains chloropicrin, a poisonous liquid or vapor. Inhalation of vapors may be fatal. Chloropicrin is readily identified by smell. Exposure to very low concentrations of vapor will cause irritation of eyes, nose and throat. Continued exposure after irritation is evident or higher concentrations may cause painful irritation to the eyes or temporary blindness. Liquid will cause chemical burns to skin or eyes. Do not get on skin, in eyes, or on clothing. Chloropicrin fumigant has the capacity to cause marked irritation to the upper respiratory tract and is a strong lachrymator (tear producing eye irritant). Low concentrations, below those necessary to cause serious systemic intoxication, are capable of causing severely painful eye irritation, hence will not be voluntarily tolerated. However, the effect may be so powerful that a person may become temporarily blinded and panic-stricken and that in turn may lead to accidents.

AIR CONCENTRATION LEVEL

Air concentrations of chloropicrin are measured with direct reading colorimetric detector devices, such as Kitagawa tubes, certified for chloropicrin at 0.1 to 16 ppm. Persons involved in the application of MIDAS 33:67 or in reentry into treated fields must wear an air-purifying respirator when required by the restrictions given in the PERSONAL PROTECTIVE EQUIPMENT and AGRICULTURAL USE REQUIREMENTS sections below. In case of spills or leaks, additional respiratory protection must be worn as detailed under Spill and Leak Procedures.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers (to include tractor drivers, co-pilots, shovelers, cross ditchers, and tarp monitors present on the application site and within the buffer zone (see exception for transient travel under heading "Buffer Zone" **must wear**:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- An air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C). For tractor drivers and co-pilots the following can be used in lieu of an air-purifying respirator:
 - A tractor equipped with a working-area air-fan dilution system consisting of a ducted fan/blower which provides air flow to the breathing zone of the tractor driver and co-pilot. The fan/blower must be mounted so that the fan/blower intake is at least 120 inches from the ground, and the fan/blower must be capable of operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.

- Full face shield or safety glasses with brow, temple and side protection if the air concentration of chloropicrin is less than 0.1 ppm. If the air concentration of chloropicrin is greater than 0.1 ppm but less than 4 ppm, wear a full face respirator or face-sealing goggles with a half-face respirator. If the chloropicrin concentration is greater than 4ppm, then see below.
- A full face respirator of one of the following types **if the air concentration of chloropicrin exceeds 4 ppm**: (a) a supplied-air respirator (MSHA/NIOSH approval number prefix TC-19C) OR (b) a self-contained breathing apparatus (SCBA) (MSHA/NIOSH approval number prefix TC-13F).

Other handlers (to include planters, hole punchers, tarp cutters, tarp removers, and tarp remover drivers present on the application site from the start of the application until 14 days following the end of the application; and within the buffer zone from the start of the application until 48 hours following the end of the application (see exception for transient travel under heading "Buffer Zone") **must wear**:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection. DO NOT wear goggles, except where otherwise required by this label.

ENGINEERING CONTROL REQUIREMENTS

MIDAS 33:67 must be transferred through connecting hoses, pipes, and/or couplings sufficiently tight to prevent workers or other persons from coming in contact with the liquid.

- All hoses, piping, and tanks used in connection with this product shall be of a type appropriate for use under the pressure and vacuum conditions to be encountered.
- Hoses between any fumigant container and the flow divider must be Teflon® hoses reinforced with stainless steel wire braid or its equivalent.
- External sight gauges, if applicable, shall be equipped with valves so that pipes to sight gauge can be shut off in case of breakage or leakage.
- The mechanical transfer system must be adequate to make necessary measurements of the pesticide being used.
- Shut-off devices must be installed on the exit end of all cylinder connections and at all disconnect points to prevent leakage of product when the transfer is stopped and hose is removed or disconnected.
- The pressure in hoses used to move the product must not exceed the manufacturer's maximum pressure specifications.
- Check equipment to ensure good condition and integrity prior to each use.

User Safety Requirements

- Do not wear jewelry, gloves, goggles (except where otherwise required by this label), tight clothing or any rubber protective clothing/boots that can trap iodomethane or chloropicrin vapors against your skin. Iodomethane and chloropicrin vapors can be trapped inside clothing and cause skin injury.
- Remove all clothing that comes in contact with liquid material at once.
- Aerate all affected clothing thoroughly outdoor prior to washing with hot water and detergent.
- Discard any clothing or absorbent materials (e.g. leather), that have been drenched or heavily contaminated with this product. Do not reuse them.
- Respirator Requirements: When a respirator is required for use with this product, the following criteria must be met consistent with the Worker Protection Standard: (a) Cartridges or canisters must be replaced when odor or irritation from this product becomes apparent, or after 8 hours of use, whichever is sooner; (b) Respirators must be fit-tested and fit-checked using a program that conforms to OSHA's requirements (described in 29 CFR Part 1910.134); (c) Respirator users must be trained using a program that conforms to OSHA's requirements (described in 29 CFR Part 1910.134); (d)

Respirator users must be examined by a qualified medical practitioner to ensure physical ability to safely wear the style of respirator to be worn.

- Follow PPE manufacturer's instructions for cleaning/maintaining protective eyewear and respirators.

USER SAFETY RECOMMENDATIONS

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside, then wash skin thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters. Iodomethane has certain properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

To address this concern for ground water quality, for broadcast applications, tarps must be sliced or removed before noon and only when rainfall is not expected within 12 hours. (Falling temperatures typically found in the late afternoon and evening will not promote dissipation of remaining Iodomethane under the sliced tarp and rainfall may cause remaining Iodomethane under the sliced tarp to leach into ground water.) For raised bed applications, rainfall is not a factor since planting occurs with the tarp in place and slicing or removing of tarps occurs after Iodomethane has dissipated.

See the GENERAL USE PRECAUTIONS; PROCEDURES PRIOR TO, DURING AND AFTER ALL APPLICATIONS; and the MIDAS 33:67 PRE-PLANT FIELD FUMIGATION METHODS sections for additional precautions and directions regarding tarp removal.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat, open flames, or sparking electrical equipment. Do not use application devices containing natural rubber, aluminum, magnesium or their alloys.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only Certified Applicators (certified by the state and trained by Arysta) in the proper handling, worker protection, and application of MIDAS 33:67 soil fumigant and handlers under their direct supervision may be present in the treatment area during application. An Arysta trained and state Certified Applicator must be on site and within the line of sight to observe handlers during the application. Handling tasks to be performed under the direct supervision of a Certified Applicator include, but are not limited to the tractor driver, co-pilot, tarp dispenser and shoveler. All such handlers must have appropriate protective equipment, as described in the PERSONAL PROTECTIVE EQUIPMENT section. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Buffer Zone

The area adjacent to the treated area is referred to as the buffer zone. The buffer zone shall extend from the edge of the treated area in all directions. See Buffer Zone Table. The minimum buffer zone distance shall be 25 feet.

The Certified Applicator supervising the soil fumigation is responsible for the following:

1. Calculating the appropriate size of the buffer zone that must be maintained from the start of the application until 48 hours following the end of the application;
2. Establishing and maintaining the buffer zone from the start of the application until 48 hours following the end of the application. The Certified Applicator must use an appropriate means to manage and maintain the buffer zone such as posting fumigant warning signs around the perimeter of the buffer zone at potential points of entry, using trained workers to patrol the buffer zone, or other equivalent means. If fumigant warning signs are used, they must be posted from the start of the application until 48 hours following the end of the application and they must include the same warning symbol and statements required for notification warning signs under AGRICULTURAL USE REQUIREMENTS with the exception that signs will indicate "Fumigant Buffer Zone" at the top of the sign and will delete the statement "areas under fumigation". If "Fumigant Buffer Zone" signs are used, the signs must be removed within 3 days of the end of the buffer zone period.
3. Ensuring that unprotected workers and bystanders do not enter the buffer zone from the start of the application until 48 hours following the end of the application. Exception: Unprotected workers and bystanders may travel through (but not engage in any activity in) the buffer zone during the application and the 48-hour period following the end of the application, provided their total exposure time in any 24-hour period is 15 minutes or less. However, travel by unprotected workers or bystanders through the fumigated area itself is prohibited during the entire 5-day Entry Restricted period. Handlers protected with required Personal Protective Equipment (PPE) may work in buffer zones. See the PERSONAL PROTECTIVE EQUIPMENT section.
4. Ensuring application site has a distinctive buffer zone. The buffer zone of the field to be treated cannot overlap the buffer zone of another field treated within the last 48 hours.
5. Ensuring that there are no occupied nursing homes, hospitals, or prisons; and no occupied licensed schools, licensed day care facilities and licensed assisted living facilities (licensed by state or local governments) within $\frac{1}{4}$ mile of the fumigated area during the buffer zone period.
6. Documenting how the buffer zone was determined, and providing the information specified below concerning occupied structures within the buffer zone; and nursing homes, hospitals, or prisons; or licensed schools, licensed day care facilities, or licensed assisted living facilities (licensed by state or local governments) within $\frac{1}{4}$ mile of the fumigated area. Records must include buffer zone calculations; diagrams; and maps. Records must also identify nursing homes, hospitals, or prisons; or licensed schools, licensed day care facilities, or licensed assisted living facilities (licensed by state or local governments) within $\frac{1}{4}$ mile of the fumigation area, and document how it was determined that such sites would be unoccupied during the application period. These records must be maintained by the Certified Applicator and by the owner/operator of the fumigated site for at least two years following the fumigation and must be made available, upon request to Federal, State, Tribal, and local enforcement personnel.

Determining Buffer Zone Distance

- Determine the size of the buffer zone using the following Buffer Zone Table.
- The size of the buffer zone will be dependant on the following three factors:
 - The number of field acres that are being treated with MIDAS 33:67.
 - The pounds of MIDAS 33:67 that are being applied per treated acre.
 - Buffer zone reduction credits.

Buffer Zone Table

MIDAS 33:67 Application Rate (Lbs per Treated Acre) ⁴	SIZE OF FIELD IN ACRES (Buffer zone distance in feet) ^{1,2}							
	Up to 5 Acres	6 – 10 Acres	11-15 Acres	16- 20 Acres	21-25 Acres	26-30 Acres	31-35 Acres	36-40 ³ Acres
100	25	25	45	60	70	80	90	95
150	25	30	60	85	100	115	130	145
175	25	35	70	100	120	135	150	165
200	25	40	80	115	135	155	175	190
250	25	50	95	140	165	190	215	235
300	30	60	115	170	200	230	260	285
350	35	70	135	200	235	265	300	330
360	35	70	140	205	240	275	310	340
400	40	75	150	225	265	305	345	380
500	50	95	190	285	335	380	430	475
530	50	100	200	300	350	400	450	500

1. For rates not listed on this table, use the buffer zone for the next highest rate, or use the following calculation to determine the exact buffer zone:

$$\text{Buffer Zone for Application Rate Not Listed} = \frac{\text{Known Buffer Zone on Table} \times \text{Application Rate Not Listed}}{\text{Rate of Application for Known Buffer Zone}}$$

2. Buffer Zone Reduction Credits:

Reduce buffer zone by 10% for each factor listed below:

- Use of flat fume / broadcast application
- Use of highly retentive films. Highly retentive films for which credit can be applied must be on an Arysta approved list. Examples of Arysta approved films are Canisil Brand Metalized 1.3 ml, Pliant Blockade® VIF 1.25 ml, or Pliant Metalized 1.0-1.25.
- Application to soils having >3% organic matter Refer to the USDA or USGS Soil Survey Maps for the treated area that identify the range of organic matter and / or a documented soil survey report that lists range of % organic matter for the treated area. Collection of samples for analysis of soil in the treated area should follow procedures as per USDA's Natural Resource Conservation Services methods. Information on soil sampling can be found at www.soil.usda.gov.

For example, if the Buffer Zone is 50 feet and the application qualifies for a buffer zone reduction credit such as use of highly retentive film, then the buffer zone can be reduced by 10%, i.e. reduced by 5 feet based on the following calculation: 50 ft – (50 ft X 10%) = 45 feet.

If the application qualifies for two buffer zone reduction credits such as use of highly retentive film and soil with >3% organic matter, then the buffer zone can be reduced by 20%, i.e. reduced by 10 feet based on the following calculation: 50 ft – (50 ft X 20%) = 40 feet.

3. Applications are limited to 40 contiguous acres or less per day
4. For raised bed applications, the treated area is the raised bed not the untreated furrows. As an example, if a raised bed field is 50% raised bed (treated) and 50% furrow (untreated), and 350 lbs of MIDAS 33:67 is applied to the raised beds of the field, then the effective application rate to the treated raised bed is 350 lbs per treated acre; and that is the rate that would determine the buffer zone.

Note: Minimum allowable buffer zone is 25 feet regardless of buffer zone reduction credits.

Buffer Zone for Pre-Plant Deep Injection Auger

- 25 feet if the application rate is less than 150 lbs MIDAS 33:67 per acre.
- 50 feet if application rate is 150 to 379 lbs MIDAS 33:67 per acre, and
- 100 feet if the application rate is 380 to 530 lbs MIDAS 33:67 per acre.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), restricted entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

Entry Restrictions

Entry into the treated area (including early entry that would otherwise be permitted under the WPS) by any person, other than a correctly trained and equipped handler who is performing a task that is permitted by this labeling, is **PROHIBITED** from the start of the application until 5 days after application and the air concentration of chloropicrin is measured to be less than 0.1 ppm. Entry during the 5-day restricted entry period is limited to the handler activities of tarp inspection, tarp repair, and flood prevention (including cross ditching).

See the Buffer Zone section for additional Entry Restrictions.

Notification at Entrances to Treated Areas

Notify all workers of the fumigation verbally and by posting warning signs at all likely entrances to the treated area for no less than 5 days after application. The signs must bear the skull and crossbones symbol and state:

- (1) "DANGER/PELIGRO"
- (2) "Areas under fumigation, DO NOT ENTER/NO ENTRE"
- (3) Iodomethane and Chloropicrin Fumigants In Use
- (4) Date and time of fumigation
- (5) MIDAS 33:67
- (6) Name, address, and telephone number of the Certified Applicator in charge of the application.

Post these fumigant warning signs for treated areas instead of the WPS signs for these applications but follow all WPS requirements pertaining to location, legibility, size and timing of posting and removal.

PPE for Reentry during the Entry-Restricted Period

The PPE required for reentry during the entry-restricted period are:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- An air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C).
- Full face shield or safety glasses with brow, temple and side protection if the air concentration of chloropicrin is less than 0.1 ppm. If the air concentration of chloropicrin is greater than 0.1 ppm, but less than 4 ppm, wear a full face respirator or face-sealing goggles with a half-face respirator. If the chloropicrin concentration is greater than 4 ppm, then see below.
- A full face respirator of one of the following types if the air concentration of chloropicrin exceeds 4 PPM: (a) a supplied-air respirator (MSHA/NIOSH approval number prefix TC-19C) OR (b) a self-contained breathing apparatus (SCBA) (MSHA/NIOSH approval number prefix TC-13F).

GENERAL INFORMATION AND INSTRUCTIONS

This fumigant is a highly hazardous material. All uses of this fumigant are covered under the Worker Protection Standard, and must be conducted in accordance with all of the requirements of the Worker Protection Standard (40 CFR Part 170). It is a restricted use pesticide that must only be used by Certified Applicators, certified by the state and trained by Arysta, in the proper handling, worker protection, and application of MIDAS 33:67 soil fumigant and handlers under their direct supervision. Before using, read

the entire label and follow all use directions and precautions. All persons working with this fumigant must be knowledgeable about the hazards and trained in the use of required air-purifying respirator equipment and detector devices, emergency procedures and proper use of the fumigant.

GENERAL USE PRECAUTIONS

- Follow all local government instructions for posting of treated areas and post all treated areas with warning signs.
- Comply with all local ordinances and regulations.
- Do not apply within ¼ mile of nursing homes, hospitals or prisons; or licensed schools, licensed day care facilities or licensed assisted living facilities (licensed by state or local governments) that will be occupied during the buffer zone period.
- Applications are limited to 40 contiguous acres or less per day.
- Do not apply this product in the presence of ground fog, inversion layers or when the potential for an inversion layer is likely to occur as this may result in product drift outside the treated area. A smoke generator can be used to indicate the presence of an inversion layer if the smoke column does not rise in a vertical pattern. In addition, consult the local weather forecast in the surrounding region for reports of expected inversion layers the day of application and within the 24 hour period following applications of MIDAS 33:67.
- Never fumigate alone. A minimum of two persons must be present during handling and application of soil fumigants. These persons must be Certified Applicators or handlers under the direct supervision and within the line of sight of a Certified Applicator.
- Certified Applicators are responsible for providing information to all handlers involved with the fumigation about precautions and procedures in the safe handling, worker protection and application of MIDAS 33:67 for soil fumigation.
- Additional instructions must be made available to handlers in the mechanical operation of the tractor and how to safely work with the operator while fumigating.
- Always handle this product in the open, with all handlers positioned "upwind" from the container and/or where there is adequate ventilation.
- Check the fumigation system for leaks or worn out equipment prior to soil injection.
- When fumigating from a tractor, it is required that 5 gallons of water be carried on the tractor and readily available for rinsing and cleaning purposes. An additional 5 gallons of water must be available in the service truck. This water must be potable and in containers marked "Decontamination water not to be used for drinking."
- For broadcast/flat fume applications, keep all pets, livestock and other domestic animals out of the treated areas until tarps have been removed.
- For raised bed applications, keep all pets, livestock and other domestic animals out of the treated areas for 5 days and until the air concentration for chloropicrin is less than 0.1 ppm at the edge of the treated area. Most raised bed applications will not result in tarp removal.
- Tarp removal within 14 days of the start of the application requires a minimum of two trained employees to be present during the operation. Non-handler personnel are prohibited from being present during tarp removal.
- See AGRICULTURAL USE REQUIREMENTS box for details regarding posting and placement of warning signs.
- Do not allow entry by unprotected persons into the fumigated area until the re-entry signs are removed. Such signs must only be removed when the air concentration of chloropicrin is measured to be less than 0.1 ppm at the edge of the treated area and no sooner than 5 days following application. Signs must remain legible during entire posting period
- Do not cut standard tarps for planting until the air concentration of chloropicrin is measured to be less than 0.1 ppm at the edge of the treated area and no sooner than 5 days following application. In the case of applications using highly retentive films, do not cut tarps until the air concentration of

chloropicrin is measured to be less than 0.1 ppm at the edge of the treated area and no sooner than 10 days following application.

- To determine whether aeration is complete, each fumigated site must be tested and shown to contain less than 0.1 ppm chloropicrin in the air space around the treated site as determined by 3 consecutive measurements taken at the down wind edge of the treated site at least 15 minutes apart.

SPILL AND LEAK PROCEDURES

- Cease all operations if any leak develops in the fumigation system.
- Evacuate everyone from the immediate areas of the spill or leak.
- Approach the area from the upwind side. Work upwind to repair leak(s), if possible.
- For entry into the area to correct the problem, trained personnel must wear loose fitting or well ventilated long-sleeved shirt and long pants, shoes plus socks and either (a) a supplied-air respirator (MSHA/NIOSH approval number prefix TC-19C) or (b) a self-contained breathing apparatus (SCBA)(MSHA/NIOSH approval number prefix TC-13F).
- Only correctly trained and PPE-equipped handlers are permitted to enter. Do not permit entry into the spill or leak area by any other person until the concentration of chloropicrin is measured to be less than 0.1 ppm as specified in section above.
- Allow spilled fumigant to evaporate or to absorb onto vermiculite, dry sand, earth, or similar absorbent material. Such material should be disposed of on site or at an approved disposal facility.
- Contaminated soil, water and other cleanup debris may be hazardous waste. Report any spill that exceeds 302 lbs (20 gallons of product) to the National Response Center at 1-800-424-8802.

PROCEDURES PRIOR TO, DURING AND AFTER ALL APPLICATIONS

CONTROL OF SOIL BORNE PESTS: MIDAS 33:67 controls soil-borne pests including nematodes, insects, weed seeds, and diseases.

Midas 33:67 will control the following pests when present in soil at the time of treatment:

Weed Seeds, including broadleaf weeds such as nutsedge, pigweed, broomrape and lambsquarters, and grasses such as bermudagrass, and annual bluegrass. Effectiveness against hard seed weeds, such as mallow, dodder, morning glory, and certain leguminous weeds may be variable.

Plant-parasitic Nematodes, such as root-knot, root lesion (meadow), cyst, citrus, burrowing, false root-knot, lance, spiral, ring, sting, stubby root, dagger, awl, sheath and stung (stylet) nematodes.

Soil-borne Insects, such as wireworms, cutworms, grubs, rootworms, ants and garden symphylans.

Soil-borne Diseases, such as *Verticillium*, *Pythium*, *Rhizoctonia*, *Phytophthora*, and *Fusarium*.

MIDAS 33:67 is not to be used as a preventative treatment for pests that may be introduced after the fumigant has been applied and/or tarps removed. To reduce the potential for the re-introduction of pests (nematodes, weed seed and disease); avoid the use of irrigation water, transplants or equipment that could carry pests into the planting area. Avoid moving infested soil back into the treated area through cultivation or other means.

Soil Preparation: The soil should be worked to the depth that is desirable for the fumigant to penetrate. Plant refuse should be worked into the soil and allowed enough time to decompose prior to treatment. Little or no plant refuse should be present on soil surface. Prior to application, the soil must be sufficiently moistened to allow seeds to swell (imbibe) in preparation for germination.

Prior to All Applications:

- Ensure that application equipment does not contain components made of natural rubber, aluminum, magnesium or their alloys.

- Soil in treatment area should be reasonably free of trash and in good tilth prior to soil treatment.
- Do not apply when soils are too wet or too dry for good agricultural practices or too hot or too cold (<55°F; or >90°F at a depth of 8 inches).

During All Applications:

- Immediately cover treated areas with a plastic tarpaulin for a minimum of 5 days.
- Allow time for complete voiding of material in the buried shanks following closure of the shutoff valve and before removing shanks from the soil.
- In the event that trash is pulled up with the shanks after completing a treatment pass, the trash must be covered with plastic film and the edges of the film buried under at least 4 inches of compacted soil before making the next pass through the field.
- Do not change cylinders when the fumigant system is under pressure. Change cylinders with all cylinder valves in the off position.

Following All Applications:

- To minimize the potential for crop injury, allow the fumigant to dissipate before planting a crop. Seeds may be used as a bioassay to determine if MIDAS 33:67 is present in the soil at concentrations sufficient to cause plant injury. See fumigation tables for planting requirements specific to the different application methods.
- Fumigation of highly acidic soils or those high in organic matter can cause ammonia toxicity to plants and/or elevated levels of soluble salts in the soil causing phytotoxicity. Analyze soil following fumigation and fertilize as indicated. Avoid those fertilizers using ammonium salts.
- For broadcast applications, tarps must be sliced or removed before noon and only when rainfall is not expected within 12 hours. (Falling temperatures typically found in the late afternoon and evening will not promote dissipation of remaining Iodomethane under the sliced tarp and rainfall may cause remaining Iodomethane under the sliced tarp to leach into ground water.) For raised bed applications, rainfall is not a factor since planting occurs with the tarp in place and slicing or removing of tarps occurs after Iodomethane has dissipated.

MIDAS 33:67 PRE-PLANT FIELD FUMIGATION METHODS

Fumigation with MIDAS 33:67 shall only be performed in accordance with the following three application techniques: 1) Raised Bed Application, 2) Broadcast/Flat Fume Application, or 3) Deep Injection Auger Probe Application (stone fruit, nut trees, vines, and field-grown ornamentals only). Application methods and rates of application for each of these methods are discussed in detail below.

RAISED BED APPLICATION

- Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of no less than 6 inches below the soil surface. The treated ground must be sealed using either:
 - Soil sealing at the time of application: The treated ground must be sealed using closing shoes, roller, compaction roller, cultipacker, or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarpaulin being laid down (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor; or
 - Bed shaper: The chisels shall be placed with the injection point under the bed shaper, and the tarpaulin shall be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor; or
 - Combination bed former and bed shaper: The chisels shall be placed between the bed former and the bed shaper. The tractor with the tarpaulin-laying equipment shall immediately follow the application tractor.
- Injection depth of between 6 and 15 inches. The injection depth in preformed beds must not be below the bed furrow.

- Injection spacing of 12 inches or less typically performed with a multiple shank applicator.
- Planting shall not occur for at least 10 days after application (refer to RAISED BED SOIL FUMIGATION TABLE below).

Application Rates for Raised Bed Fumigation: Rates in the table below are given in pounds of MIDAS 33:67 per broadcast acre. The amount of product applied will be proportionate to the row spacing and width of the raised bed. To calculate the amount of product to be applied, multiply the application rate in lbs MIDAS 33:67/broadcast acre by the appropriate modifier from the Field Rate Modifier Table provided below.

RAISED BED SOIL FUMIGATION TABLE		
Crop	MIDAS 33:67 Per Broadcast Acre ¹	Time Between ² Application and Planting
Field-Grown Ornamentals Peppers Strawberries Tomatoes	Standard Tarp 300 - 530 lbs/Broadcast Acre (19.9 – 35.1 gal/Broadcast Acre)	10 – 14 days ³
	Highly Retentive Film⁴ 175-250 lbs/Broadcast Acre 11.6 – 16.6 gal/Broadcast Acre	14 – 21 days when using highly retentive film
NOTE: ¹ For fields infested with Nutsedge and Malva, apply a minimum of 450 lbs/broadcast acre (29.8 gal/acre) of MIDAS 33:67 with standard film and 250 lbs/broadcast acre (16.6 gal/acre) with highly retentive film . ² If tarps are cut for removal before planting, aerate a minimum of 24 hours after tarps are cut before removing tarps. Wait at least 5 days after application before cutting standard tarps. Wait at least 10 days after application before cutting highly retentive films. ³ Use the longer planting restriction period under conditions of high soil moisture, heavy soils, or rain. ⁴ Contact your Arysta LifeScience representative for film selection and rate reduction recommendations and approved films.		

Field Rate Modifier Table for Raised Bed Applications

Row Spacing (inches)	Bed Width (inches)	Field Rate Modifier
72	40	0.55
72	36	0.50
72	32	0.44
72	30	0.42
72	28	0.39
66	32	0.48
66	30	0.45
66	28	0.42
66	24	0.36
60	30	0.50
60	28	0.47
48	28	0.58

BROADCAST / FLAT FUME APPLICATION

- Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of 6 to 15 inches below the soil surface.
 - Soil sealing at time of application: The treated ground must be sealed using closing shoes, roller, compaction roller, cultipacker or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarpaulin being laid down (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor.
- Planting shall not occur for at least 10 days after application.
- This product may be applied by broadcast/flat fume application with standard films at rates in the following table:

APPLICATION RATES FOR BROADCAST / FLAT FUME FUMIGATION WITH STANDARD TARPS		
Crop	MIDAS 33:67 Per Acre¹	Time Between Application and Planting²
Field-Grown Ornamentals Peppers Strawberries Tomatoes Turf	300 – 530 lbs/Acre (19.9 – 35.1 gal/Acre)	10 – 14 days
Stone Fruits (Apricot, Sweet Cherry, Tart Cherry, Nectarine, Peach, Plum, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot, Fresh Prune) Tree Nuts (Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (Hazelnut), Hickory Nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Black Walnut, English Walnut) Vines (Table, Raisin and Wine Grape)	360- 530 lbs/Acre (23.8 – 35.1 gal/Acre)	10 – 14 days
Nurseries (including strawberries, stone fruits, tree nuts and conifer trees)	530 lbs/Acre (35.1 gal/Acre)	10 – 14 days
NOTE: ¹ For fields infested with Nutsedge and Malva apply a minimum of 300 lbs/acre (19.9 gal/acre) of MIDAS 33:67. ² Wait at least 5 days after application before cutting tarps. Aerate a minimum of 24 hours after tarps are cut before removing tarps. Use the longer planting interval under conditions of high soil moisture, heavy soils, or rain.		

Application Rates for Broadcast/Flat Fume Fumigation with Highly Retentive Films

Contact your Arysta LifeScience North America representative for information on film selection and rate reduction recommendations for highly retentive film. Applications using highly retentive film shall not exceed 300 lbs/Acre (19.9 gal/Acre).

Cutting and Removal of Highly Retentive Films for Broadcast/Flat Fume Applications

- Do not cut highly retentive films until at least 10 days following the application. Wait a minimum of 14 days after application before planting.
- When tarpaulins are removed from the field, removal shall begin no sooner than 24 hours after tarpaulin cutting has been completed (a task which cannot occur until a minimum of 10 days after application, as stated above).
- Planting shall not occur for at least 14 days after application.

PREPLANT DEEP INJECTION AUGER-PROBE APPLICATION

For Stone Fruits, Tree Nuts, Vines, and Field Grown Ornamental Trees and Shrubs, use 2 lbs of MIDAS 33:67 per injection site, typically to a depth of between 18 to 36 inches below the soil surface, though deeper injections may be made as appropriate. Use 1 injection site per 100 square feet (i.e., one injection site every 10 feet in a standard grid pattern). Planting or replanting of Stone Fruits, Tree Nuts, Vines, and Field-Grown Ornamental Trees and Shrubs may begin 14 days after treatment. **DO NOT PLANT** if the odor of chloropicrin is detectable.

Do not treat more than 230 trees/shrubs/vines per acre per day.

Buffer Zones

- 25 feet if the application rate is less than 150 lbs MIDAS 33:67 per acre.
- 50 feet if application rate is 150 to 379 lbs MIDAS 33:67 per acre, and
- 100 feet if the application rate is 380 to 530 lbs MIDAS 33:67 per acre.

ROTATIONAL CROPS

There are no crop rotation restrictions.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store in a dry, cool, well-ventilated area under lock and key. When appropriate to prevent tipping, store cylinders upright, secured to a rack or wall. Post as a pesticide storage area.

Handling: Product cylinders shall not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging or sliding. Do not use rope slings, hooks, tongs, or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured.

Do not remove valve protection bonnet and safety cap until immediately before use. When cylinder is not in use, close valve by turning clockwise until hand tight, screw safety cap onto valve outlet, and replace protection bonnet.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Return of Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

This pesticide container, whether full or partially used, is the property of the manufacturer or distributor where it was purchased and must be returned to the distributor of origin. Do not ship containers without safety caps or valve protection bonnets. Containers shall never be refilled by the consumer or used for any other product or purpose.

FOR 24-HOUR CHEMICAL EMERGENCY (spill, leak, fire or accident) ASSISTANCE:

Call CHEMTREC at 1-800-424-9300

Warranty and Disclaimer Statement

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America, LLC ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF ARYSTA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.**

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF ARYSTA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT ARYSTA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.

MIDAS® and the Midas logo are registered trademarks of Arysta LifeScience North America, LLC
Arysta LifeScience and the Arysta LifeScience logo are registered trademarks of Arysta LifeScience, LLC



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

June 18, 2009

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

BECKY RHODES
ARYSTA LIFESCIENCE NORTH AMERICA, LLC
15401 WESTON PARKWAY, SUITE 150
CARY, NC 27513-

PRODUCT NAME: MIDAS 33:67
COMPANY NAME: ARYSTA LIFESCIENCE NORTH AMERICA, LLC
OPP IDENTIFICATION NUMBER:
EPA FILE SYMBOL: 66330-59
EPA RECEIPT DATE: 06/17/09

SUBJECT: RECEIPT OF AMENDMENT

DEAR REGISTRANT:

The Office of Pesticide Programs has received your application for an amendment and it has passed an administrative screen for completeness.

During the initial screen we determined that the application appears to qualify for fast track review. The package will now be forwarded to the Product Manager for review to determine its acceptability for fast track status.

If you have any questions, please contact Registration Division, Risk Management Team 21, at (703) 308-9354.

Sincerely,
Front End Processing Staff
Information Services Branch
Information Technology & Resources Management Division

Fee for Service

rem
{852168>~

This package includes the following

☐ New Registration

☒ Amendment

☐ Studies? ☐ Fee Waiver?

☐ volpay % Reduction: ____

for Division

☐ AD

☐ BPPD

☒ RD

Risk Mgr. 21

Receipt No.

S- 852168

EPA File Symbol/Reg. No.

66330-59

Pin-Punch Date:

6/17/2009

☒ This item is NOT subject to FFS action.

Action Code:

Requested:

Granted:

Amount Due: \$ _____

Parent/Child Decisions:

NON-FEE

☐ Inert Cleared for Intended Use

☐ Uncleared Inert in Product

Reviewer: *[Signature]*

Date: 6/18/09

Remarks:

PM 21

FAST-TRACK AMENDMENTS-Completeness Screening Checklist

Experts In-Processing Signature: L. [Signature]

EPA Reg. Number: <u>66330-53</u>	EPA Receipt Date: <u>6/17/09</u>		
Check List Item	Yes	No	NA
1 Application Form (EPA Form 8570-1) -signed?	<input checked="" type="checkbox"/>		
2 Confidential Statement of Formula (EPA Form 8570-29) - signed?			<input checked="" type="checkbox"/>
3 Certification with Respect to Citation of Data (EPA Form 8570-34) signed?			<input checked="" type="checkbox"/>
4 Formulator's Exemption Statement (EPA Form 8570-27) - signed?			<input checked="" type="checkbox"/>
5 Data Matrix (EPA Form 8570-35) [Applicable, for adding me-too uses]			<input checked="" type="checkbox"/>
a) Selective Method?			
b) Cite-All Method? Applicant owns data or list only the companies offered to pay			
c) Public copy of Matrix provided? See PR Notice 98-5			
6 Is Label Included? (5 copies)	<input checked="" type="checkbox"/>		
Comments: <u>Label Attached</u> <u>6/25/09</u> <u>Summers - Assign Tamara</u> <u>300</u> <u>FI only & other states label</u>			

**EPA**

United States
Environmental Protection Agency
Washington, DC 20460

☐ Registration
☒ Amendment
☐ Other:

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number Arysta LifeScience North America, LLC/66330-59	2. EPA Product Manager Mary L. Waller	3. Proposed Classification <input type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Arysta LifeScience North America, LLC/ Midas 33:67	PM# 21	
5. Name and Address of Applicant (Include ZIP Code) Arysta LifeScience North America, LLC 15401 Weston Parkway, Suite 150 Cary, NC 27513 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(I), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input checked="" type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application
<input type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below

Explanation: Use additional page(s) if necessary. (For Section I and Section II.)

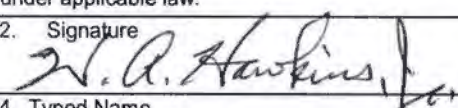
Label amendment to create "Florida Only" and "Other States" labels as previously done for other Midas brand products.

There are no data to review so there is no PRIA fee associated with this action.

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Metal	
*Certification must be submitted		If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt.	No. per container
				<input type="checkbox"/> Plastic	
				<input type="checkbox"/> Glass	
				<input type="checkbox"/> Paper	
				<input type="checkbox"/> Other (Specify)	
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled				<input type="checkbox"/> Other _____	

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application)		
Name W. A. Hawkins, Jr., Ph.D.	Title Regulatory Manager	Telephone No. (Include Area Code) 919-678-4886
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped) 
2. Signature 	3. Title Regulatory Manager	
4. Typed Name W. A. Hawkins, Jr., Ph.D.	5. Date 6/16/09	



June 16, 2009

Ms. Mary L. Waller, PM 21
Document Processing Desk (AMEND)
Office of Pesticide Programs – 7504P
U.S. Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202

**Subject: Midas 33:67
EPA Reg. No. 66330-59
Label Amendment to Create "Florida Only" and "Other States" Labels**

Dear Ms. Waller:

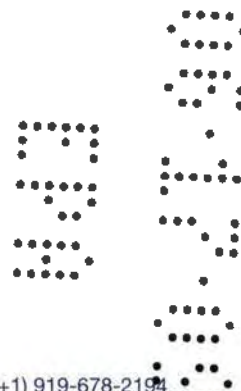
Enclosed herewith are proposed amended labels for Midas 33:67 (EPA Reg. No. 66330-59). The purpose of this submission is to gain Agency approval for "Florida Only" and "Other States" labels for this product. Arysta LifeScience has already obtained approval of similar labels for Midas 50:50 (EPA Reg. No. 66330-57) and Midas 98:2 (EPA Reg. No. 66330-43). You and Tamue Gibson discussed this concept with Becky Rhodes and me when we met on March 24, 2009. In accordance with your instructions at that time, I have already gained acceptance of the language on the "Florida Only" label from the Florida Department of Agriculture and Consumer Services. Of course, they cannot register the label until after it is accepted by the Agency.

If you find the enclosed amended labels acceptable, please stamp and return on copy of each for our records and our use in supporting the required state registrations. If you have any questions or require additional information, you may contact me at (919) 678-4886 or by e-mail at alex.hawkins@arystalifescience.com.

Since there are no data to review, there are no PRIA fees associated with this action.

Sincerely,

W. A. Hawkins, Jr., Ph.D.
Regulatory Manager
Arysta LifeScience North America



**RESTRICTED USE PESTICIDE
 DUE TO ACUTE TOXICITY**

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

MIDAS® 33:67

FOR SALE AND USE IN FLORIDA ONLY

Only For Pre-Plant Fumigations of Fields Intended for Commercial Production of Listed Crops and Field-Grown Ornamentals, for the Control of Soil-Borne Pests Including Weed Seeds, Nematodes, Insects, and Diseases.

ACTIVE INGREDIENTS:

Iodomethane.....	32.93%
Chloropicrin	66.67%
OTHER INGREDIENTS:	0.40%
TOTAL:	100.00%

One gallon weighs 15.1 pounds (5 pounds Iodomethane and 10.1 pounds Chloropicrin).

**KEEP OUT OF REACH OF CHILDREN
 DANGER / PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
 (If you do not understand the label, find someone to explain it to you in detail).

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person.
HOT LINE NUMBERS Have the product container or label with you when calling a poison control center or doctor, or going for treatment. FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL: 1-866-303-6952 or 1-651-632-8946	
NOTE TO PHYSICIAN Probable mucosal damage may contraindicate the use of gastric lavage. Symptoms of overexposure may include irritation to eyes, skin, and respiratory system, shortness of breath, nausea, vomiting, dizziness, ataxia, slurred speech, drowsiness, blurred vision, staggering gait and mental imbalance, with probable recovery after period of no exposure. Treatment is symptomatic.	

EPA Reg. No. 66330-59
EPA Est. No.

For Product Information Call: 1-866-761-9397

Net Contents: LBS.

Manufactured for
Arysta LifeScience North America, LLC Corporation
15401 Weston Parkway, Suite 150
Cary, NC 27513

PRECAUTIONARY STATEMENTS

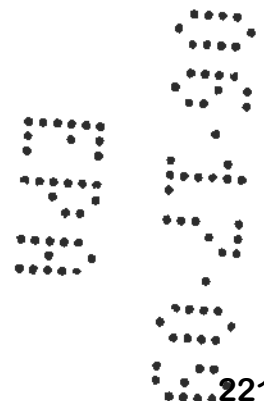
HAZARD TO HUMANS AND DOMESTIC ANIMALS

Danger. Corrosive. Causes irreversible eye damage. Corrosive to skin. Causes skin burns. May be fatal if inhaled or swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin or on clothing. Do not breathe vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SPECIAL NOTE: This product contains chloropicrin, a poisonous liquid or vapor. Inhalation of vapors may be fatal. Chloropicrin is readily identified by smell. Exposure to very low concentrations of vapor will cause irritation of eyes, nose and throat. Continued exposure after irritation is evident or higher concentrations may cause painful irritation to the eyes or temporary blindness. Liquid will cause chemical burns to skin or eyes. Do not get on skin, in eyes, or on clothing. Chloropicrin fumigant has the capacity to cause marked irritation to the upper respiratory tract and is a strong lachrymator (tear producing eye irritant). Low concentrations, below those necessary to cause serious systemic intoxication, are capable of causing severely painful eye irritation, hence will not be voluntarily tolerated. However, the effect may be so powerful that a person may become temporarily blinded and panic-stricken and that in turn may lead to accidents.

AIR CONCENTRATION LEVEL

Air concentrations of chloropicrin are measured with direct reading colorimetric detector devices, such as Kitagawa tubes, certified for chloropicrin at 0.1 to 16 ppm. Persons involved in the application of MIDAS 33:67 or in reentry into treated fields must wear an air-purifying respirator when required by the restrictions given in the PERSONAL PROTECTIVE EQUIPMENT and AGRICULTURAL USE REQUIREMENTS sections below. In case of spills or leaks, additional respiratory protection must be worn as detailed under Spill and Leak Procedures.



PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers (to include tractor drivers, co-pilots, shovelers, cross ditchers, and tarp monitors present on the application site and within the buffer zone (see exception for transient travel under heading "Buffer Zone" must wear:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- ~~Full face shield or safety glasses with brow, temple and side protection is required. DO NOT wear goggles.~~
- An air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C).
 - ~~A tractor equipped with a working-area air-fan dilution system consisting of a ducted fan/blower which provides air flow to the breathing zone of the tractor driver and co-pilot. The fan/blower must be mounted so that the fan/blower intake is at least 126 inches from the ground, and the fan/blower must be capable of operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.~~
 - ~~For tractor drivers and co-pilots the following can be used in lieu of an air-purifying respirator:~~
- Full face shield or safety glasses with brow, temple and side protection if the air concentration of chloropicrin is less than 0.1 ppm. If the air concentration of chloropicrin is greater than 0.1 ppm but less than 4 ppm, wear a full face respirator or face-sealing goggles with a half-face respirator. If the chloropicrin concentration is greater than 4ppm, then see below.
- A full face respirator of one of the following types if the air concentration of chloropicrin **exceeds 4 ppm**: (a) a supplied-air respirator (MSHA/NIOSH approval number prefix TC-19C) OR (b) a self-contained breathing apparatus (SCBA) (MSHA/NIOSH approval number prefix TC-13F).

Other handlers (to include planters, hole punchers, tarp cutters, tarp removers, and tarp remover drivers present on the application site from the start of the application until 14 days following the end of the application; and within the buffer zone from the start of the application until 48 hours following the end of the application (see exception for transient travel under heading "Buffer Zone") must wear:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection, ~~is required.~~ DO NOT wear goggles (except where otherwise required by this label).

ENGINEERING CONTROL REQUIREMENTS

MIDAS 33:67 must be transferred through connecting hoses, pipes, and/or couplings sufficiently tight to prevent workers or other persons from coming in contact with the liquid.

- All hoses, piping, and tanks used in connection with this product shall be of a type appropriate for use under the pressure and vacuum conditions to be encountered.
- Hoses between any fumigant container and the flow divider must be Teflon® hoses reinforced with stainless steel wire braid or its equivalent.
- External sight gauges, if applicable, shall be equipped with valves so that pipes to sight gauge can be shut off in case of breakage or leakage.
- The mechanical transfer system must be adequate to make necessary measurements ~~of the~~ pesticide being used.
- Shut-off devices must be installed on the exit end of all cylinder connections and at all ~~disconnect~~ points to prevent leakage of product when the transfer is stopped and ~~hose is removed or~~ disconnected.
- The pressure in hoses used to move the product must not exceed the manufacturer's maximum pressure specifications.
- Check equipment to ensure good condition and integrity prior to each use.

User Safety Requirements

- Do not wear jewelry, gloves, goggles (except where otherwise required by this label), tight clothing or any rubber protective clothing/boots that can trap iodomethane or chloropicrin vapors against your skin. Iodomethane and chloropicrin vapors can be trapped inside clothing and cause skin injury.
- Remove all clothing that comes in contact with liquid material at once.
- Aerate all affected clothing thoroughly outdoor prior to washing with hot water and detergent.
- Discard any clothing or absorbent materials (e.g. leather), that have been drenched or heavily contaminated with this product. Do not reuse them.
- Respirator Requirements: When a respirator is required for use with this product, the following criteria must be met consistent with the Worker Protection Standard: (a) Cartridges or canisters must be replaced daily-or when odor or irritation from this product becomes apparent, or after 8 hours of use, whichever is sooner; (b) Respirators must be fit-tested and fit-checked using a program that conforms to OSHA's requirements (described in 29 CFR Part 1910.134); (c) Respirator users must be trained using a program that conforms to OSHA's requirements (described in 29 CFR Part 1910.134); (d) Respirator users must be examined by a qualified medical practitioner to ensure physical ability to safely wear the style of respirator to be worn.
- Follow PPE manufacturer's instructions for cleaning/maintaining protective eyewear and respirators.

USER SAFETY RECOMMENDATIONS

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside, then wash skin thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters. Iodomethane has certain properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

To address this concern for ground water quality, for broadcast applications, tarps must be sliced or removed before noon and only when rainfall is not expected within 12 hours. (Falling temperatures typically found in the late afternoon and evening will not promote dissipation of remaining Iodomethane under the sliced tarp and rainfall may cause remaining Iodomethane under the sliced tarp to leach into ground water.) For raised bed applications, rainfall is not a factor since planting occurs with the tarp in place and slicing or removing of tarps occurs after Iodomethane has dissipated.

See the GENERAL USE PRECAUTIONS; PROCEDURES PRIOR TO, DURING AND AFTER ALL APPLICATIONS; and the MIDAS 33:67 PRE-PLANT FIELD FUMIGATION METHODS sections for additional precautions and directions regarding tarp removal.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat, open flames, or sparking electrical equipment. Do not use application devices containing natural rubber, aluminum, magnesium or their alloys.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only Certified Applicators (certified by ~~both~~ the state and trained by Arysta) ~~trained~~ in the proper handling, worker protection, and application of MIDAS 33:67 soil fumigant and ~~workershandlers~~ under their direct supervision may be present in the treatment area during application. An Arysta trained and state Certified Applicator must be on site and within the line of sight to observe handlers during the application. Handling tasks to be performed under the direct supervision of a Certified Applicator include, but are not limited to the tractor driver, co-pilot, tarp dispenser and shoveler. All such handlers must have appropriate protective equipment, as described in the PERSONAL PROTECTIVE EQUIPMENT section. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Buffer Zone

The area adjacent to the treated area is referred to as the buffer zone. The buffer zone shall extend from the edge of the treated area in all directions. See Buffer Zone Table. The minimum buffer zone distance shall be 25 feet.

The Certified Applicator supervising the soil fumigation is responsible for the following:

1. Calculating the appropriate size of the buffer zone that must be maintained from the start of the application until during the first 48 hours following the end of the application;
2. Establishing and maintaining the buffer zone from the start of the application until during the 48 hours following the end of the application; ~~and~~ Buffer zones must be on the property under the control of the Certified Applicator and must not include property that is not under the control of the Certified Applicator unless written permission is obtained prior to fumigation, including signature, from responsible parties from all properties that will be included or partially included in the buffer zone. Buffer zones shall not extend onto public roads or areas, or onto any other land for which written consent is not attainable. The Certified Applicator must use an appropriate means to manage and maintain the buffer zone such as posting fumigant warning signs around the perimeter of the buffer zone at potential points of entry, using trained workers to patrol the buffer zone, or other equivalent means. If fumigant warning signs are used, they must be posted from the start of the application until 48 hours following the end of the application and they must include the same warning symbol and statements required for notification warning signs under AGRICULTURAL USE REQUIREMENTS with the exception that signs will indicate "Fumigant Buffer Zone" at the top of the sign and will delete the statement "areas under fumigation". If "Fumigant Buffer Zone" signs are used, the signs must be removed within 3 days of the end of the buffer zone period.
3. Ensuring that unprotected workers and bystanders do not enter the buffer zone from the start of the application until during the 48 hours following the end of the application. Exception: Unprotected workers and bystanders may travel through (but not engage in any activity in) the buffer zone during the application and the 48-hour period following the end of the application, provided their total exposure time in any 24-hour period is 15 minutes or less. However, travel by unprotected workers or bystanders through the fumigated area itself is prohibited during the entire 5-day Entry Restricted period. Handlers protected with required Personal Protective Equipment (PPE) required for early entry into a treated area may work in buffer zones. See the PERSONAL PROTECTIVE EQUIPMENT section.
4. Ensuring application site has a distinctive buffer zone. The buffer zone of the field to be treated cannot overlap the buffer zone of another field treated within the last 48 hours.
5. Ensuring that there are no occupied nursing homes, hospitals, or prisons; and no occupied licensed schools, licensed day care facilities and licensed assisted living facilities (licensed by state or local governments) within ¼ mile of the fumigated area during the buffer zone period.
- 5-6. Documenting how the buffer zone was determined, and providing the information specified below concerning occupied structures within the buffer zone; and nursing homes, hospitals, or prisons; or licensed schools, licensed day care facilities, or licensed assisted living facilities (licensed by state or local governments) within ¼ mile of the fumigated area. Records must include buffer

zone calculations; diagrams; maps; and the dates and times people left occupied structures within the buffer zone; and when they were allowed to return to such structures. Records must include any consent documentation signed by parties whose properties were outside the control of the Certified Applicator but were included in the buffer zone. Records must also identify nursing homes, hospitals, or prisons; or licensed schools, licensed day care facilities, or licensed assisted living facilities (licensed by state or local governments) within ¼ mile of the fumigation area, and document how it was determined that such sites would be unoccupied during the application period. The Certified Applicator supervising the soil fumigation must document how the buffer zone was determined, the location of unoccupied sensitive sites within ¼ mile of the fumigated area, and how persons in occupied structures located within the buffer zone were protected. These records must be maintained by the Certified Applicator and by the owner/operator of the fumigated site for at least two years following the fumigation and must be made available, upon request to Federal, State, Tribal, and local enforcement personnel.

Determining Buffer Zone Distance

- Determine the size of the buffer zone using the following Buffer Zone Table.
- The size of the buffer zone will be dependant on the following three factors:
 - The number of field acres that are being treated with MIDAS 33:67.
 - The pounds of MIDAS 33:67 that are being applied per treated acre.
 - Buffer zone reduction credits.

Buffer Zone Table

MIDAS 33:67 Application Rate (Lbs per Treated Acre) ⁴	SIZE OF FIELD IN ACRES (Buffer zone distance in feet) ^{1,2}							
	Up to 5 Acres	6 – 10 Acres	11-15 Acres	16- 20 Acres	21-25 Acres	26-30 Acres	31-35 Acres	36-40 ³ Acres
100	25	25	45	60	70	80	90	95
150	25	30	60	85	100	115	130	145
175	25	35	70	100	120	135	150	165
200	25	40	80	115	135	155	175	190
250	25	50	95	140	165	190	215	235
300	30	60	115	170	200	230	260	285
350	35	70	135	200	235	265	300	330
360	35	70	140	205	240	275	310	340
400	40	75	150	225	265	305	345	380
500	50	95	190	285	335	380	430	475
530	50	100	200	300	350	400	450	500

1. For rates not listed on this table, use the buffer zone for the next highest rate, or use the following calculation to determine the exact buffer zone:

$$\text{Buffer Zone for Application Rate Not Listed} = \frac{\text{Known Buffer Zone on Table} \times \text{Application Rate Not Listed}}{\text{Rate of Application for Known Buffer Zone}}$$

2. Buffer Zone Reduction Credits:

Reduce buffer zone by 10% for each factor listed below:

- Use of flat fume / broadcast application
- Use of High-Barrierhighly retentive films. High-BarrierHighly retentive films for which credit can be applied must be on an Arysta approved list. Examples of Arysta approved films are Canslit Brand Metalized 1.3 ml, Pliant Blockade® VIF 1.25 ml, or Pliant Metalized 1.0-1.25.
- Application to soils having >3% organic matter Refer to the USDA or USGS Soil Survey Maps for the treated area that identify the range of organic matter and / or a documented soil survey report that lists range of % organic matter for the treated area. Collection of samples for analysis of soil in the treated area should follow procedures as per USDA's Natural Resource Conservation Services methods. Information on soil sampling can be found at www.soil.usda.gov.

For example, if the Buffer Zone is 50 feet and the application qualifies for a buffer zone reduction credit

such as use of Metalized highly retentive film, then the buffer zone can be reduced by 10%, i.e. reduced by 5 feet based on the following calculation: $50 \text{ ft} - (50 \text{ ft} \times 10\%) = 45 \text{ feet}$.

If the application qualifies for two buffer zone reduction credits such as use of high barrier highly retentive film and soil with >3% organic matter, then the buffer zone can be reduced by 20%, i.e. reduced by 10 feet based on the following calculation: $50 \text{ ft} - (50 \text{ ft} \times 20\%) = 40 \text{ feet}$.

3. Applications are limited to 40 contiguous acres or less per day, on a single site.
4. For raised bed applications, the treated area is the raised bed not the untreated furrows. As an example, if a raised bed field is 50% raised bed (treated) and 50% furrow (untreated), and 350 lbs of MIDAS 33:67 is applied to the raised beds of the field, then the effective application rate to the treated raised bed is 350 lbs per treated acre; and that is the rate that would determine the buffer zone.

Note: Minimum allowable buffer zone is 25 feet regardless of buffer zone reduction credits.

Buffer Zone for Pre-Plant Deep Injection Auger

- 25 feet if the application rate is less than 150 lbs MIDAS 33:67 per acre.
- 50 feet if application rate is 150 to 379 lbs MIDAS 33:67 per acre, and
- 100 feet if the application rate is 380 to 530 lbs MIDAS 33:67 per acre.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), restricted entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

Entry Restrictions

Entry into the treated area (including early entry that would otherwise be permitted under the WPS) by any person, other than a correctly trained and equipped handler who is performing a task that is permitted by this labeling, is PROHIBITED from the start of the application until 5 days after application and the air concentration of chloropicrin is measured to be less than 0.1 ppm. Entry during the 5-day restricted entry period is limited to the handler activities of tarp inspection, tarp repair, and flood prevention (including cross ditching). Early entry under the WPS is limited to tarp inspection and repair. Non-handler entry is prohibited while tarps are being removed.

See the Buffer Zone section for additional Entry Restrictions.

Notification at Entrances to Treated Areas

Notify all workers of the fumigation verbally and by posting warning signs at all likely entrances to the treated area for no less than 5 days after application. The signs must bear the skull and crossbones symbol and state:

- (1) "DANGER/PELIGRO"
- (2) "Areas under fumigation, DO NOT ENTER/NO ENTRE"
- (3) Iodomethane and Chloropicrin Fumigants In Use
- (4) Date and time of fumigation
- (5) MIDAS 33:67
- (6) Name, address, and telephone number of the Certified Applicator in charge of the application.

Post these fumigant warning signs for treated areas instead of the WPS signs for these applications but follow all WPS requirements pertaining to location, legibility, size and timing of posting and removal.

PPE for Reentry during the Entry-Restricted Period

The PPE required for reentry during the entry-restricted period are:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- An air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C).
- Full face shield or safety glasses with brow, temple and side protection if the air concentration of chloropicrin is less than 0.1 ppm. If the air concentration of chloropicrin is greater than 0.1 ppm, but less than 4 ppm, wear a full face respirator or face-sealing goggles with a half-face respirator. If the chloropicrin concentration is greater than 4 ppm, then see below.
- A full face respirator of one of the following types if the air concentration of chloropicrin exceeds 4 PPM: (a) a supplied-air respirator (MSHA/NIOSH approval number prefix TC-19C) OR (b) a self-contained breathing apparatus (SCBA) (MSHA/NIOSH approval number prefix TC-13F).

GENERAL INFORMATION AND INSTRUCTIONS

This fumigant is a highly hazardous material. All uses of this fumigant are covered under the Worker Protection Standard, and must be conducted in accordance with all of the requirements of the Worker Protection Standard (40 CFR Part 170). It is a restricted use pesticide that must only be used by Certified Applicators, certified by the state and trained by Arysta, in the proper handling, worker protection, and application of MIDAS 33:67 soil fumigant and handlers under their direct supervision or under the direct supervision of individuals trained and certified in its proper use. Before using, read the entire label and follow all use directions and precautions. All persons working with this fumigant must be knowledgeable about the hazards and trained in the use of required air-purifying respirator equipment and detector devices, emergency procedures and proper use of the fumigant.

GENERAL USE PRECAUTIONS

- Follow all local government instructions for posting of treated areas and post all treated areas with warning signs.
- Comply with all local ordinances and regulations.
- Do not apply within ¼ mile of nursing homes, hospitals or prisons; or licensed schools, licensed day care facilities or licensed assisted living facilities (licensed by state or local governments) that will be occupied during the buffer zone period. ~~any occupied sensitive site such as schools, day care facilities, nursing homes, hospitals, prisons, and playgrounds.~~
- Applications are limited to 40 contiguous acres or less per day. ~~on a single site.~~
- Do not apply this product in the presence of ground fog, inversion layers or when the potential for an inversion layer is likely to occur as this may result in product drift outside the treated area. A smoke generator can be used to indicate the presence of an inversion layer if the smoke column does not rise in a vertical pattern. In addition, consult the local weather forecast in the surrounding region for reports of expected inversion layers the day of application and within the 24 hour period following applications of MIDAS 33:67.
- Never fumigate alone. A minimum of two persons trained employees must be present during handling and application of soil fumigants. These persons must be Certified Applicators or handlers under the direct supervision and within the line of sight of a Certified Applicator.
- Certified Applicators are responsible for providing information to all workershandlers involved with the fumigation about precautions and procedures in the safe handling, worker protection and application of MIDAS 33:67 for soil fumigation.
- Additional instructions must be made available to workershandlers in the mechanical operation of the tractor and how to safely work with the operator while fumigating.

- Always handle this product in the open, with all workershandlers positioned "upwind" from the container and/or where there is adequate ventilation.
- Check the fumigation system for leaks or worn out equipment prior to soil injection.
- When fumigating from a tractor, it is required that 5 gallons of water be carried on the tractor and readily available for rinsing and cleaning purposes. An additional 5 gallons of water must be available in the service truck. This water must be potable and in containers marked "Decontamination water not to be used for drinking."
- For broadcast/flat fume applications, keep all pets, livestock and other domestic animals out of the treated areas until tarps have been removed.
- For raised bed applications, keep all pets, livestock and other domestic animals out of the treated areas for 5 days and until the air concentration for chloropicrin is less than 0.1 ppm at the edge of the treated area. Most raised bed applications will not result in tarp removal.
- Tarp removal within 14 days of the start of the application requires a minimum of two trained employees to be present during the operation. Non-handler personnel are prohibited from being present during tarp removal.
- See AGRICULTURAL USE REQUIREMENTS box for details regarding posting and placement of warning signs.
- Do not allow entry by unprotected persons into the fumigated area until the re-entry signs are removed. Such signs must only be removed when the air concentration of chloropicrin is measured to be less than 0.1 ppm at the edge of the treated area and no sooner than 5 days following application. Signs must remain legible during entire posting period. ~~Also, do not cut tarps for planting until these conditions have been met.~~
- Do not cut standard tarps for planting until the air concentration of chloropicrin is measured to be less than 0.1 ppm at the edge of the treated area and no sooner than 5 days following application. In the case of applications using highly retentive films, do not cut tarps until the air concentration of chloropicrin is measured to be less than 0.1 ppm at the edge of the treated area and no sooner than 10 days following application.
- To determine whether aeration is complete, each fumigated site must be tested and shown to contain less than 0.1 ppm chloropicrin in the air space around the treated site as determined by 3 consecutive measurements taken at the down wind edge of the treated site at least 15 minutes apart.

SPILL AND LEAK PROCEDURES

- Cease all operations if any leak develops in the fumigation system.
- Evacuate everyone from the immediate areas of the spill or leak.
- Approach the area from the upwind side. Work upwind to repair leak(s), if possible.
- For entry into the area to correct the problem, trained personnel must wear loose fitting or well ventilated long-sleeved shirt and long pants, shoes plus socks and either (a) a supplied-air respirator (MSHA/NIOSH approval number prefix TC-19C) or (b) a self-contained breathing apparatus (SCBA)(MSHA/NIOSH approval number prefix TC-13F).
- Only correctly trained and PPE-equipped handlers are permitted to enter. Do not permit entry into the spill or leak area by any other person until the concentration of chloropicrin is measured to be less than 0.1 ppm as specified in section above.
- Allow spilled fumigant to evaporate or to absorb onto vermiculite, dry sand, earth, or similar absorbent material. Such material should be disposed of on site or at an approved disposal facility.
- Contaminated soil, water and other cleanup debris may be hazardous waste. Report any spill that exceeds 302 lbs (20 gallons of product) to the National Response Center at 1-800-424-8802.

PROCEDURES PRIOR TO, DURING AND AFTER ALL APPLICATIONS

CONTROL OF SOIL BORNE PESTS: MIDAS 33:67 controls soil-borne pests including nematodes, insects, weed seeds, and diseases.

Midas 33:67 will control the following pests when present in soil at the time of treatment:

Weed Seeds, including broadleaf weeds such as nutsedge, pigweed, broomrape and lambsquarters, and grasses such as bermudagrass, and annual bluegrass. Effectiveness against hard seed weeds, such as mallow, dodder, morning glory, and certain leguminous weeds may be variable.

Plant-parasitic Nematodes, such as root-knot, root lesion (meadow), cyst, citrus, burrowing, false root-knot, lance, spiral, ring, sting, stubby root, dagger, awl, sheath and stung (stylet) nematodes.

Soil-borne Insects, such as wireworms, cutworms, grubs, rootworms, ants and garden symphylans.

Soil-borne Diseases, such as *Verticillium*, *Pythium*, *Rhizoctonia*, *Phytophthora*, and *Fusarium*.

MIDAS 33:67 is not to be used as a preventative treatment for pests that may be introduced after the fumigant has been applied and/or tarps removed. To reduce the potential for the re-introduction of pests (nematodes, weed seed and disease); avoid the use of irrigation water, transplants or equipment that could carry pests into the planting area. Avoid moving infested soil back into the treated area through cultivation or other means.

Soil Preparation: The soil should be worked to the depth that is desirable for the fumigant to penetrate. Plant refuse should be worked into the soil and allowed enough time to decompose prior to treatment. Little or no plant refuse should be present on soil surface. Prior to application, the soil must be sufficiently moistened to allow seeds to swell (imbibe) in preparation for germination.

Prior to All Applications:

- Ensure that application equipment does not contain components made of natural rubber, aluminum, magnesium or their alloys.
- Soil in treatment area should be reasonably free of trash and in good tilth prior to soil treatment.
- Do not apply when soils are too wet or too dry for good agricultural practices or too hot or too cold to wet or cold soils (<55°F; or >90°F at a depth of 8 inches).

During All Applications:

- Immediately cover treated areas with a plastic tarpaulin for a minimum of 5 days.
- Allow time for complete voiding of material in the buried shanks following closure of the shutoff valve and before removing shanks from the soil.
- In the event that trash is pulled up with the shanks after completing a treatment pass, the trash must be covered with plastic film and the edges of the film buried under at least 4 inches of compacted soil before making the next pass through the field.
- Do not change cylinders when the fumigant system is under pressure. Change cylinders with all cylinder valves in the off position.

Following All Applications:

- To minimize the potential for crop injury, allow the fumigant to dissipate before planting a crop. Seeds may be used as a bioassay to determine if MIDAS 33:67 is present in the soil at concentrations sufficient to cause plant injury. ~~DO NOT PLANT if the odor of the chloropicrin is detectable.~~ See fumigation tables for planting requirements specific to the different application methods.
- Fumigation of highly acidic soils or those high in organic matter can cause ammonia toxicity to plants and or elevated levels of soluble salts in the soil causing phytotoxicity. Analyze soil following fumigation and fertilize as indicated. Avoid those fertilizers using ammonium salts.
- For broadcast applications, tarps must be sliced or removed before noon and only when rainfall is not expected within 12 hours. (Falling temperatures typically found in the late afternoon and evening will not promote dissipation of remaining Iodomethane under the sliced tarp and rainfall may cause remaining Iodomethane under the sliced tarp to leach into ground water.) For raised bed applications,

rainfall is not a factor since planting occurs with the tarp in place and slicing or removing of tarps occurs after Iodomethane has dissipated.

MIDAS 33:67 PRE-PLANT FIELD FUMIGATION METHODS

Fumigations with MIDAS 33:67 shall only be performed in accordance with the following three application techniques: 1) Raised Bed Application, 2) Broadcast/Flat Fume Application, or 3) Deep Injection Auger Probe Application (stone fruit, nut trees, vines, and field-grown ornamentals ~~s-trees and shrubs~~ only). Application methods and rates of application for each of these methods are discussed in detail below.

RAISED BED APPLICATION

- Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of no less than 6 inches below the soil surface. The treated ground must be sealed using either:
 - Soil sealing at the time of application: The treated ground must be sealed using closing shoes, roller, compaction roller, cultipacker, or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarpaulin being laid down ~~Closing shoes and compaction roller: The closing shoes shall cover the chisel marks with soil just ahead of the compaction roller, and the tarpaulin shall be laid down simultaneously~~ (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor; or
 - Bed shaper: The chisels shall be placed with the injection point under the bed shaper, and the tarpaulin shall be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor; or
 - Combination bed former and bed shaper: The chisels shall be placed between the bed former and the bed shaper. The tractor with the tarpaulin-laying equipment shall immediately follow the application tractor.
- Injection depth of between 6 and 15 inches. The injection depth in preformed beds must not be below the bed furrow.
- Injection spacing of 12 inches or less typically performed with a multiple shank applicator.
- Planting shall not occur for at least 10 days after application (refer to RAISED BED SOIL FUMIGATION TABLE below).

Application Rates for Raised Bed Fumigation: Rates in the table below are given in pounds of MIDAS 33:67 per broadcast acre. The amount of product applied will be proportionate to the row spacing and width of the raised bed. To calculate the amount of product to be applied, multiply the application rate in lbs MIDAS 33:67/broadcast acre by the appropriate modifier from the Field Rate Modifier Table provided below.

RAISED BED SOIL FUMIGATION TABLE		
Crop	MIDAS 33:67 Per Broadcast Acre ¹	Time Between ² Application and Planting
Field-Grown Ornamentals Peppers Strawberries Tomatoes	Standard TarpFilm 300 - 530 lbs/Broadcast Acre (19.9 – 35.1 gal/Broadcast Acre)	10 – 14 days ^{2, 3}
	Highly Retentive Film⁴ 175-250 lbs/Broadcast Acre 11.6 – 16.6 gal/Broadcast Acre	14 – 21 days when using highly retentive film ^{4, 6}

NOTE:

¹ For fields infested with Nutsedge and Malva, apply a minimum of 450 lbs/broadcast acre (29.8 gal/acre) of MIDAS 33:67 with standard film and 250 lbs/broadcast acre (16.6 gal/acre) with highly retentive film.

- ² If tarps are cut for removal before planting, aerate a minimum of 24 hours after tarps are cut before removing tarps. Wait at least 5 days after application before cutting standard tarps. Wait at least 10 days after application before cutting highly retentive films.
- ²³ Use the longer planting restriction period under conditions of high soil moisture, heavy soils, or rain, or persistence of chloropicrin odor in the soil.
- ³ Contact your Arysta LifeScience representative for film selection and rate reduction recommendations and approved films. If standard tarpaulins are NOT removed, planting can occur a minimum of 10 days after application, which includes the minimum 24 hours of aeration once the tarps have been cut. If tarpaulins are not cut or aerated prior to planting, the odor of chloropicrin must not be detectable. If odor of chloropicrin is detectable, wait a minimum of 14 days before planting to avoid possible plant injury.
- ⁴ Use of highly retentive films (e.g. VIF and approved Metallic) will require a rate reduction of up to 40-50% of the maximum use rate. Contact your Arysta LifeScience representative for film selection and rate reduction recommendations.
- ⁵⁴ If highly retentive films are not removed, planting can occur a minimum of 14 days after application, which includes the minimum 24 hours of aeration once the tarps have been cut. If the tarpaulins are not cut or aerated prior to planting, the odor of chloropicrin must not be detectable. If odor of chloropicrin is detectable, wait a minimum of 21 days before planting to avoid possible plant injury.

Field Rate Modifier Table for Raised Bed Applications

Row Spacing (inches)	Bed Width (inches)	Field Rate Modifier
72	40	0.55
72	36	0.50
72	32	0.44
72	30	0.42
72	28	0.39
66	32	0.48
66	30	0.45
66	28	0.42
66	24	0.36
60	30	0.50
60	28	0.47
48	28	0.58

BROADCAST / FLAT FUME APPLICATION FUMIGATION

- Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of 6 to 15 inches below the soil surface.
 - Soil sealing at time of application: Closing shoes and compaction roller: The treated ground must be sealed using closing shoes, roller, and compaction roller, cultipacker or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarpaulin being laid down. The closing shoes shall cover the chisel marks with soil just ahead of the compaction roller, and the tarpaulin shall be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor.
 - Planting shall not occur for at least 10 days after application. (refer to BROADCAST / FLAT FUME APPLICATION TABLE).
- ⊖ This product may be applied by broadcast/flat fume application with standard polyethylene films or highly retentive films, as they become available. Contact your Arysta LifeScience North America representative for information on film selection and rate reduction recommendations.
- at rates in the following table:

Application Rates for Broadcast or Flat Fumigation

APPLICATION RATES FOR BROADCAST / FLAT FUME APPLICATION TABLE FUMIGATION WITH STANDARD TARPS

Crop	MIDAS 33:67 Per Acre ¹	Time Between Application and Planting ²
Field-Grown Ornamentals Peppers Strawberries Tomatoes Turf	300 – 530 lbs/Acre (19.9 – 35.1 gal/Acre)	10 – 14 days
Stone Fruits (Apricot, Sweet Cherry, Tart Cherry, Nectarine, Peach, Plum, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot, Fresh Prune) Tree Nuts (Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (Hazelnut), Hickory Nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Black Walnut, English Walnut) Vines (Table, Raisin and Wine Grape)	360- 530 lbs/Acre (23.8 – 35.1 gal/Acre)	10 – 14 days ²
Nurseries (including strawberries, stone fruits, tree nuts and conifer trees)	530 lbs/Acre (35.1 gal/Acre)	10 – 14 days ²

NOTE:

- ¹ For fields infested with Nutsedge and Malva apply a minimum of 300 lbs/acre (~~19.9~~ 19.9 gal/acre) of MIDAS 33:67.
- ² Wait at least 5 days after application before cutting tarps. Aerate a minimum of 24 hours after tarps are cut before removing tarps. If tarpaulins are removed, planting can occur 10 days after application, which includes the minimum 5-day treatment period before tarps are cut plus the minimum of 24 hours of aeration after tarps are cut and before they are removed. Use the longer planting interval restriction period under conditions of high soil moisture, heavy soils, or rain, or persistence of chloropicrin odor in the soil.

Application Rates for Broadcast/Flat Fume Fumigation with Highly Retentive Films

Contact your Arysta LifeScience North America representative for information on film selection and rate reduction recommendations for highly retentive film. Applications using highly retentive film shall not exceed 300 lbs/Acre (19.9 gal/Acre).

Cutting and Removal of Highly Retentive Films for Broadcast/Flat Fume Applications

- Do not cut highly retentive films until at least 10 days following the application. Wait a minimum of 14 days after application before planting.

Tarpaulin Cutting and Removal for Broadcast / Flat Fume Applications: Following the completion of the application of MIDAS 33:67, the tarpaulin shall not be cut for a minimum of 5 days (120 hours) following completion of injection to the application block.

- If the When tarpaulins is are removed from the field, removal shall begin no sooner than 24 hours after tarpaulin cutting has been completed (a task which cannot occur until a minimum of 510 days after application, as stated above).
- Planting shall not occur for at least 14 days after application.

PREPLANT DEEP INJECTION AUGER-PROBE APPLICATION

For Stone Fruits, Tree Nuts, Vines, and Field Grown Ornamental Trees and Shrubs, use 2 lbs of MIDAS 33:67 per injection site, typically to a depth of between 18 to 36 inches below the soil surface, though

deeper injections may be made as appropriate. Use 1 injection site per 100 square feet (i.e., one injection site every 10 feet in a standard grid pattern). Planting or replanting of Stone Fruits, Tree Nuts, Vines, and Field-Grown Ornamentals Trees and Shrubs may begin 14 days after treatment. DO NOT PLANT if the odor of chloropicrin is detectable.

Do not treat more than 230 trees/shrubs/vines per acre per day.

Buffer Zones

- 25 feet if the application rate is less than 150 lbs MIDAS 33:67 per acre.
- 50 feet if application rate is 150 to 379 lbs MIDAS 33:67 per acre, and
- 100 feet if the application rate is 380 to 530 lbs MIDAS 33:67 per acre.

ROTATIONAL CROPS

There are no crop rotation restrictions.

FOOD CROP ROTATION RESTRICTIONS

Food crops other than strawberry, tomatoes and peppers require a 4 month plant back rotation restriction from the date of fumigant application. Crop rotation to non-food crops or non-bearing fruit or nut trees is not restricted.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store in a dry, cool, well-ventilated area under lock and key. When appropriate to prevent tipping, store cylinders upright, secured to a rack or wall. Post as a pesticide storage area.

Handling: Product cylinders shall not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging or sliding. Do not use rope slings, hooks, tongs, or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured.

Do not remove valve protection bonnet and safety cap until immediately before use. When cylinder is not in use, close valve by turning clockwise until hand tight, screw safety cap onto valve outlet, and replace protection bonnet.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Return of Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

This pesticide container, whether full or partially used, is the property of the manufacturer or distributor where it was purchased and must be returned to the distributor of origin. Do not ship containers without safety caps or valve protection bonnets. Containers shall never be refilled by the consumer, or used for any other product or purpose.

FOR 24-HOUR CHEMICAL EMERGENCY (spill, leak, fire or accident) ASSISTANCE:
Call CHEMTREC at 1-800-424-9300

Warranty and Disclaimer Statement

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America, LLC Corporation ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF ARYSTA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.**

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF ARYSTA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT ARYSTA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.

MIDAS® is a registered trademark of Arysta LifeScience North America Corporation

MIDAS® and the Midas logo are registered trademarks of Arysta LifeScience North America, LLC

Arysta LifeScience and the Arysta LifeScience logo are registered trademarks of Arysta LifeScience, LLC

**RESTRICTED USE PESTICIDE
 DUE TO ACUTE TOXICITY**

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

MIDAS® 33:67

FOR SALE AND USE IN STATES OTHER THAN FLORIDA

Only For Pre-Plant Fumigations of Fields Intended for Commercial Production of Listed Crops and Field-Grown Ornamentals, for the Control of Soil-Borne Pests Including Weed Seeds, Nematodes, Insects, and Diseases.

ACTIVE INGREDIENTS:

Iodomethane.....32.93%

Chloropicrin66.67%

OTHER INGREDIENTS:0.40%

TOTAL:.....100.00%

One gallon weighs 15.1 pounds (5 pounds Iodomethane and 10.1 pounds Chloropicrin).

**KEEP OUT OF REACH OF CHILDREN
 DANGER / PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
 (If you do not understand the label, find someone to explain it to you in detail).

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person.
HOT LINE NUMBERS Have the product container or label with you when calling a poison control center or doctor, or going for treatment. FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL: 1-866-303-6952 or 1-651-632-8946	
NOTE TO PHYSICIAN Probable mucosal damage may contraindicate the use of gastric lavage. Symptoms of overexposure may include irritation to eyes, skin, and respiratory system, shortness of breath, nausea, vomiting, dizziness, ataxia, slurred speech, drowsiness, blurred vision, staggering gait and mental imbalance, with probable recovery after period of no exposure. Treatment is symptomatic.	

EPA Reg. No. 66330-59
EPA Est. No.

For Product Information Call: 1-866-761-9397

Net Contents: LBS.

Manufactured for
Arysta LifeScience North America, LLC Corporation
15401 Weston Parkway, Suite 150
Cary, NC 27513

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

Danger. Corrosive. Causes irreversible eye damage. Corrosive to skin. Causes skin burns. May be fatal if inhaled or swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin or on clothing. Do not breathe vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SPECIAL NOTE: This product contains chloropicrin, a poisonous liquid or vapor. Inhalation of vapors may be fatal. Chloropicrin is readily identified by smell. Exposure to very low concentrations of vapor will cause irritation of eyes, nose and throat. Continued exposure after irritation is evident or higher concentrations may cause painful irritation to the eyes or temporary blindness. Liquid will cause chemical burns to skin or eyes. Do not get on skin, in eyes, or on clothing. Chloropicrin fumigant has the capacity to cause marked irritation to the upper respiratory tract and is a strong lachrymator (tear producing eye irritant). Low concentrations, below those necessary to cause serious systemic intoxication, are capable of causing severely painful eye irritation, hence will not be voluntarily tolerated. However, the effect may be so powerful that a person may become temporarily blinded and panic-stricken and that in turn may lead to accidents.

AIR CONCENTRATION LEVEL

Air concentrations of chloropicrin are measured with direct reading colorimetric detector devices, such as Kitagawa tubes, certified for chloropicrin at 0.1 to 16 ppm. Persons involved in the application of MIDAS 33:67 or in reentry into treated fields must wear an air-purifying respirator when required by the restrictions given in the PERSONAL PROTECTIVE EQUIPMENT and AGRICULTURAL USE REQUIREMENTS sections below. In case of spills or leaks, additional respiratory protection must be worn as detailed under Spill and Leak Procedures.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers (to include tractor drivers, co-pilots, shovelers, cross ditchers, and tarp monitors present on the application site and within the buffer zone (see exception for transient travel under heading "Buffer Zone" must wear:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- ~~Full face shield or safety glasses with brow, temple and side protection is required. DO NOT wear goggles.~~
- An air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C). For tractor drivers and co-pilots the following can be used in lieu of an air-purifying respirator:
 - A tractor equipped with a working-area air-fan dilution system consisting of a ducted fan/blower which provides air flow to the breathing zone of the tractor driver and co-pilot. The fan/blower must be mounted so that the fan/blower intake is at least 120 inches from the

ground, and the fan/blower must be capable of operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.

- Full face shield or safety glasses with brow, temple and side protection if the air concentration of chloropicrin is less than 0.1 ppm. If the air concentration of chloropicrin is greater than 0.1 ppm but less than 4 ppm, wear a full face respirator or face-sealing goggles with a half-face respirator. If the chloropicrin concentration is greater than 4ppm, then see below.
- A full face respirator of one of the following types if the air concentration of chloropicrin exceeds 4 ppm: (a) a supplied-air respirator (MSHA/NIOSH approval number prefix TC-19C) OR (b) a self-contained breathing apparatus (SCBA) (MSHA/NIOSH approval number prefix TC-13F).

Other handlers (to include planters, hole punchers, tarp cutters, tarp removers, and tarp remover drivers present on the application site from the start of the application until 14 days following the end of the application; and within the buffer zone from the start of the application until 48 hours following the end of the application (see exception for transient travel under heading "Buffer Zone") **must wear:**

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection is required. DO NOT wear goggles except where otherwise required by this label.

ENGINEERING CONTROL REQUIREMENTS

MIDAS 33:67 must be transferred through connecting hoses, pipes, and/or couplings sufficiently tight to prevent workers or other persons from coming in contact with the liquid.

- All hoses, piping, and tanks used in connection with this product shall be of a type appropriate for use under the pressure and vacuum conditions to be encountered.
- Hoses between any fumigant container and the flow divider must be Teflon® hoses reinforced with stainless steel wire braid or its equivalent.
- External sight gauges, if applicable, shall be equipped with valves so that pipes to sight gauge can be shut off in case of breakage or leakage.
- The mechanical transfer system must be adequate to make necessary measurements of the pesticide being used.
- Shut-off devices must be installed on the exit end of all cylinder connections and at all disconnect points to prevent leakage of product when the transfer is stopped and hose is removed or disconnected.
- The pressure in hoses used to move the product must not exceed the manufacturer's maximum pressure specifications.
- Check equipment to ensure good condition and integrity prior to each use.

User Safety Requirements

- Do not wear jewelry, gloves, goggles (except where otherwise required by this label), tight clothing or any rubber protective clothing/boots that can trap iodomethane or chloropicrin vapors against your skin. Iodomethane and chloropicrin vapors can be trapped inside clothing and cause skin injury.
- Remove all clothing that comes in contact with liquid material at once.
- Aerate all affected clothing thoroughly outdoor prior to washing with hot water and detergent.
- Discard any clothing or absorbent materials (e.g. leather), that have been drenched or heavily contaminated with this product. Do not reuse them.
- Respirator Requirements: When a respirator is required for use with this product, the following criteria must be met consistent with the Worker Protection Standard: (a) Cartridges or canisters must be replaced daily or when odor or irritation from this product becomes apparent, or after 8 hours of use, whichever is sooner; (b) Respirators must be fit-tested and fit-checked using a program that conforms to OSHA's requirements (described in 29 CFR Part 1910.134); (c) Respirator users must be

trained using a program that conforms to OSHA's requirements (described in 29 CFR Part 1910.134);
(d) Respirator users must be examined by a qualified medical practitioner to ensure physical ability to safely wear the style of respirator to be worn.

- Follow PPE manufacturer's instructions for cleaning/maintaining protective eyewear and respirators.

USER SAFETY RECOMMENDATIONS

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside, then wash skin thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters. Iodomethane has certain properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

To address this concern for ground water quality, for broadcast applications, tarps must be sliced or removed before noon and only when rainfall is not expected within 12 hours. (Falling temperatures typically found in the late afternoon and evening will not promote dissipation of remaining Iodomethane under the sliced tarp and rainfall may cause remaining Iodomethane under the sliced tarp to leach into ground water.) For raised bed applications, rainfall is not a factor since planting occurs with the tarp in place and slicing or removing of tarps occurs after Iodomethane has dissipated.

See the GENERAL USE PRECAUTIONS; PROCEDURES PRIOR TO, DURING AND AFTER ALL APPLICATIONS; and the MIDAS 33:67 PRE-PLANT FIELD FUMIGATION METHODS sections for additional precautions and directions regarding tarp removal.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat, open flames, or sparking electrical equipment. Do not use application devices containing natural rubber, aluminum, magnesium or their alloys.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only Certified Applicators (certified by ~~both~~ the state and trained by Arysta) ~~trained~~ in the proper handling, worker protection, and application of MIDAS 33:67 soil fumigant and workershandlers under their direct supervision may be present in the treatment area during application. An Arysta trained and state Certified Applicator must be on site and within the line of sight to observe handlers during the application. Handling tasks to be performed under the direct supervision of a Certified Applicator include, but are not limited to the tractor driver, co-pilot, tarp dispenser and shoveler. All such handlers must have appropriate protective equipment, as described in the PERSONAL PROTECTIVE EQUIPMENT section. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Buffer Zone

The area adjacent to the treated area is referred to as the buffer zone. The buffer zone shall extend from the edge of the treated area in all directions. See Buffer Zone Table. The minimum buffer zone distance shall be 25 feet.

The Certified Applicator supervising the soil fumigation is responsible for the following:

1. Calculating the appropriate size of the buffer zone that must be maintained from the start of the application until during the first 48 hours following the end of the application;
2. Establishing and maintaining the buffer zone from the start of the application until during the 48 hours following the end of the application; and The Certified Applicator must use an appropriate means to manage and maintain the buffer zone such as posting fumigant warning signs around the perimeter of the buffer zone at potential points of entry, using trained workers to patrol the buffer zone, or other equivalent means. If fumigant warning signs are used, they must be posted from the start of the application until 48 hours following the end of the application and they must include the same warning symbol and statements required for notification warning signs under AGRICULTURAL USE REQUIREMENTS with the exception that signs will indicate "Fumigant Buffer Zone" at the top of the sign and will delete the statement "areas under fumigation". If "Fumigant Buffer Zone" signs are used, the signs must be removed within 3 days of the end of the buffer zone period.
3. Ensuring that unprotected workers and bystanders do not enter the buffer zone from the start of the application until during the 48 hours following the end of the application. Exception: Unprotected workers and bystanders may travel through (but not engage in any activity in) the buffer zone during the application and the 48-hour period following the end of the application, provided their total exposure time in any 24-hour period is 15 minutes or less. However, travel by unprotected workers or bystanders through the fumigated area itself is prohibited during the entire 5-day Entry Restricted period. Handlers protected with required Personal Protective Equipment (PPE) required for early entry into a treated area may work in buffer zones. See the PERSONAL PROTECTIVE EQUIPMENT section.
4. Ensuring application site has a distinctive buffer zone. The buffer zone of the field to be treated cannot overlap the buffer zone of another field treated within the last 48 hours.
5. Ensuring that there are no occupied nursing homes, hospitals, or prisons; and no occupied licensed schools, licensed day care facilities and licensed assisted living facilities (licensed by state or local governments) within ¼ mile of the fumigated area during the buffer zone period.
- 5-6. Documenting how the buffer zone was determined, and providing the information specified below concerning occupied structures within the buffer zone; and nursing homes, hospitals, or prisons; or licensed schools, licensed day care facilities, or licensed assisted living facilities (licensed by state or local governments) within ¼ mile of the fumigated area. Records must include buffer zone calculations; diagrams; and maps. Records must also identify nursing homes, hospitals, or prisons; or licensed schools, licensed day care facilities, or licensed assisted living facilities (licensed by state or local governments) within ¼ mile of the fumigation area, and document how it was determined that such sites would be unoccupied during the application period. The Certified Applicator supervising the soil fumigation must document how the buffer zone was determined, the location of unoccupied sensitive sites within ¼ mile of the fumigated area, and how persons in occupied structures located within the buffer zone were protected. These records must be maintained by the Certified Applicator and by the owner/operator of the fumigated site for at least two years following the fumigation and must be made available, upon request to Federal, State, Tribal, and local enforcement personnel.

Determining Buffer Zone Distance

- Determine the size of the buffer zone using the following Buffer Zone Table.
- The size of the buffer zone will be dependant on the following three factors:
 - The number of field acres that are being treated with MIDAS 33:67.

- o The pounds of MIDAS 33:67 that are being applied per treated acre.
- o Buffer zone reduction credits.

Buffer Zone Table

MIDAS 33:67 Application Rate (Lbs per Treated Acre) ⁴	SIZE OF FIELD IN ACRES (Buffer zone distance in feet) ^{1,2}							
	Up to 5 Acres	6 – 10 Acres	11-15 Acres	16- 20 Acres	21-25 Acres	26-30 Acres	31-35 Acres	36-40 ³ Acres
100	25	25	45	60	70	80	90	95
150	25	30	60	85	100	115	130	145
175	25	35	70	100	120	135	150	165
200	25	40	80	115	135	155	175	190
250	25	50	95	140	165	190	215	235
300	30	60	115	170	200	230	260	285
350	35	70	135	200	235	265	300	330
360	35	70	140	205	240	275	310	340
400	40	75	150	225	265	305	345	380
500	50	95	190	285	335	380	430	475
530	50	100	200	300	350	400	450	500

1. For rates not listed on this table, use the buffer zone for the next highest rate, or use the following calculation to determine the exact buffer zone:

$$\text{Buffer Zone for Application Rate Not Listed} = \frac{\text{Known Buffer Zone on Table} \times \text{Application Rate Not Listed}}{\text{Rate of Application for Known Buffer Zone}}$$

2. Buffer Zone Reduction Credits:

Reduce buffer zone by 10% for each factor listed below:

- Use of flat fume / broadcast application
- Use of High Barrierhighly retentive films. High BarrierHighly retentive films for which credit can be applied must be on an Arysta approved list. Examples of Arysta approved films are Canslit Brand Metalized 1.3 ml, Pliant Blockade® VIF 1.25 ml, or Pliant Metalized 1.0-1.25.
- Application to soils having >3% organic matter Refer to the USDA or USGS Soil Survey Maps for the treated area that identify the range of organic matter and / or a documented soil survey report that lists range of % organic matter for the treated area. Collection of samples for analysis of soil in the treated area should follow procedures as per USDA's Natural Resource Conservation Services methods. Information on soil sampling can be found at www.soil.usda.gov.

For example, if the Buffer Zone is 50 feet and the application qualifies for a buffer zone reduction credit such as use of Metalizedhighly retentive film, then the buffer zone can be reduced by 10%, i.e. reduced by 5 feet based on the following calculation: 50 ft – (50 ft X 10%) = 45 feet.

If the application qualifies for two buffer zone reduction credits such as use of high-barrierhighly retentive film and soil with >3% organic matter, then the buffer zone can be reduced by 20%, i.e. reduced by 10 feet based on the following calculation: 50 ft – (50 ft X 20%) = 40 feet.

- 3.** Applications are limited to 40 contiguous acres or less per day
on a single site.

- 3.4.** For raised bed applications, the treated area is the raised bed not the untreated furrows. As an example, if a raised bed field is 50% raised bed (treated) and 50% furrow (untreated), and 350 lbs of MIDAS 33:67 is applied to the raised beds of the field, then the effective application rate to the treated raised bed is 350 lbs per treated acre; and that is the rate that would determine the buffer zone.

Note: Minimum allowable buffer zone is 25 feet regardless of buffer zone reduction credits.

Buffer Zone for Pre-Plant Deep Injection Auger

- 25 feet if the application rate is less than 150 lbs MIDAS 33:67 per acre.
- 50 feet if application rate is 150 to 379 lbs MIDAS 33:67 per acre, and
- 100 feet if the application rate is 380 to 530 lbs MIDAS 33:67 per acre.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), restricted entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

Entry Restrictions

Entry into the treated area (including early entry that would otherwise be permitted under the WPS) by any person, other than a correctly trained and equipped handler who is performing a task that is permitted by this labeling, is PROHIBITED from the start of the application until 5 days after application and the air concentration of chloropicrin is measured to be less than 0.1 ppm. Entry during the 5-day restricted entry period is limited to the handler activities of tarp inspection, tarp repair, and flood prevention (including cross ditching). Early entry under the WPS is limited to tarp inspection and repair. Non-handler entry is prohibited while tarps are being removed.

See the Buffer Zone section for additional Entry Restrictions.

Notification at Entrances to Treated Areas

Notify all workers of the fumigation verbally and by posting warning signs at all likely entrances to the treated area for no less than 5 days after application. The signs must bear the skull and crossbones symbol and state:

- (1) "DANGER/PELIGRO"
- (2) "Areas under fumigation, DO NOT ENTER/NO ENTRE"
- (3) Iodomethane and Chloropicrin Fumigants In Use
- (4) Date and time of fumigation
- (5) MIDAS 33:67
- (6) Name, address, and telephone number of the Certified Applicator in charge of the application.

Post these fumigant warning signs for treated areas instead of the WPS signs for these applications but follow all WPS requirements pertaining to location, legibility, size and timing of posting and removal.

PPE for Reentry during the Entry-Restricted Period

The PPE required for reentry during the entry-restricted period are:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- An air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C).
- Full face shield or safety glasses with brow, temple and side protection if the air concentration of chloropicrin is less than 0.1 ppm. If the air concentration of chloropicrin is greater than 0.1 ppm, but less than 4 ppm, wear a full face respirator or face-sealing goggles with a half-face respirator. If the chloropicrin concentration is greater than 4 ppm, then see below.
- A full face respirator of one of the following types if the air concentration of chloropicrin exceeds 4 PPM: (a) a supplied-air respirator (MSHA/NIOSH approval number prefix TC-19C) OR (b) a self-contained breathing apparatus (SCBA) (MSHA/NIOSH approval number prefix TC-13F).

GENERAL INFORMATION AND INSTRUCTIONS

This fumigant is a highly hazardous material. All uses of this fumigant are covered under the Worker Protection Standard, and must be conducted in accordance with all of the requirements of the Worker Protection Standard (40 CFR Part 170). It is a restricted use pesticide that must only be used by Certified Applicators, certified by the state and trained by Arysta, in the proper handling, worker protection, and application of MIDAS 33:67 soil fumigant and handlers under their direct supervision, or under the direct supervision of individuals trained and certified in its proper use. Before using, read the entire label and follow all use directions and precautions. All persons working with this fumigant must be knowledgeable about the hazards and trained in the use of required air-purifying respirator equipment and detector devices, emergency procedures and proper use of the fumigant.

GENERAL USE PRECAUTIONS

- Follow all local government instructions for posting of treated areas and post all treated areas with warning signs.
- Comply with all local ordinances and regulations.
- Do not apply within ¼ mile of nursing homes, hospitals or prisons; or licensed schools, licensed day care facilities or licensed assisted living facilities (licensed by state or local governments) that will be occupied during the buffer zone period. ~~any occupied sensitive site such as schools, day care facilities, nursing homes, hospitals, prisons, and playgrounds.~~
- Applications are limited to 40 contiguous acres or less per day. ~~on a single site.~~
- Do not apply this product in the presence of ground fog, inversion layers or when the potential for an inversion layer is likely to occur as this may result in product drift outside the treated area. A smoke generator can be used to indicate the presence of an inversion layer if the smoke column does not rise in a vertical pattern. In addition, consult the local weather forecast in the surrounding region for reports of expected inversion layers the day of application and within the 24 hour period following applications of MIDAS 33:67.
- Never fumigate alone. A minimum of two persons trained employees must be present during handling and application of soil fumigants. These persons must be Certified Applicators or handlers under the direct supervision and within the line of sight of a Certified Applicator.
- Certified Applicators are responsible for providing information to all workershandlers involved with the fumigation about precautions and procedures in the safe handling, worker protection and application of MIDAS 33:67 for soil fumigation.
- Additional instructions must be made available to workershandlers in the mechanical operation of the tractor and how to safely work with the operator while fumigating.
- Always handle this product in the open, with all workershandlers positioned "upwind" from the container and/or where there is adequate ventilation.
- Check the fumigation system for leaks or worn out equipment prior to soil injection.
- When fumigating from a tractor, it is required that 5 gallons of water be carried on the tractor and readily available for rinsing and cleaning purposes. An additional 5 gallons of water must be available in the service truck. This water must be potable and in containers marked "Decontamination water not to be used for drinking."
- For broadcast/flat fume applications, keep all pets, livestock and other domestic animals out of the treated areas until tarps have been removed.
- For raised bed applications, keep all pets, livestock and other domestic animals out of the treated areas for 5 days and until the air concentration for chloropicrin is less than 0.1 ppm at the edge of the treated area. Most raised bed applications will not result in tarp removal.
- Tarp removal within 14 days of the start of the application requires a minimum of two trained employees to be present during the operation. Non-handler personnel are prohibited from being present during tarp removal.

- See AGRICULTURAL USE REQUIREMENTS box for details regarding posting and placement of warning signs.
- Do not allow entry by unprotected persons into the fumigated area until the re-entry signs are removed. Such signs must only be removed when the air concentration of chloropicrin is measured to be less than 0.1 ppm at the edge of the treated area and no sooner than 5 days following application. Signs must remain legible during entire posting period. ~~Also, do not cut tarps for planting until these conditions have been met.~~
- Do not cut standard tarps for planting until the air concentration of chloropicrin is measured to be less than 0.1 ppm at the edge of the treated area and no sooner than 5 days following application. In the case of applications using highly retentive films, do not cut tarps until the air concentration of chloropicrin is measured to be less than 0.1 ppm at the edge of the treated area and no sooner than 10 days following application.
- To determine whether aeration is complete, each fumigated site must be tested and shown to contain less than 0.1 ppm chloropicrin in the air space around the treated site as determined by 3 consecutive measurements taken at the down wind edge of the treated site at least 15 minutes apart.

SPILL AND LEAK PROCEDURES

- Cease all operations if any leak develops in the fumigation system.
- Evacuate everyone from the immediate areas of the spill or leak.
- Approach the area from the upwind side. Work upwind to repair leak(s), if possible.
- For entry into the area to correct the problem, trained personnel must wear loose fitting or well ventilated long-sleeved shirt and long pants, shoes plus socks and either (a) a supplied-air respirator (MSHA/NIOSH approval number prefix TC-19C) or (b) a self-contained breathing apparatus (SCBA)(MSHA/NIOSH approval number prefix TC-13F).
- Only correctly trained and PPE-equipped handlers are permitted to enter. Do not permit entry into the spill or leak area by any other person until the concentration of chloropicrin is measured to be less than 0.1 ppm as specified in section above.
- Allow spilled fumigant to evaporate or to absorb onto vermiculite, dry sand, earth, or similar absorbent material. Such material should be disposed of on site or at an approved disposal facility.
- Contaminated soil, water and other cleanup debris may be hazardous waste. Report any spill that exceeds 302 lbs (20 gallons of product) to the National Response Center at 1-800-424-8802.

PROCEDURES PRIOR TO, DURING AND AFTER ALL APPLICATIONS

CONTROL OF SOIL BORNE PESTS: MIDAS 33:67 controls soil-borne pests including nematodes, insects, weed seeds, and diseases.

Midas 33:67 will control the following pests when present in soil at the time of treatment:

Weed Seeds, including broadleaf weeds such as nutsedge, pigweed, broomrape and lambsquarters, and grasses such as bermudagrass, and annual bluegrass. Effectiveness against hard seed weeds, such as mallow, dodder, morning glory, and certain leguminous weeds may be variable.

Plant-parasitic Nematodes, such as root-knot, root lesion (meadow), cyst, citrus, burrowing, false root-knot, lance, spiral, ring, sting, stubby root, dagger, awl, sheath and stung (stylet) nematodes.

Soil-borne Insects, such as wireworms, cutworms, grubs, rootworms, ants and garden symphylans.

Soil-borne Diseases, such as *Verticillium*, *Pythium*, *Rhizoctonia*, *Phytophthora*, and *Fusarium*.

MIDAS 33:67 is not to be used as a preventative treatment for pests that may be introduced after the fumigant has been applied and/or tarps removed. To reduce the potential for the re-introduction of pests (nematodes, weed seed and disease); avoid the use of irrigation water, transplants or equipment that

could carry pests into the planting area. Avoid moving infested soil back into the treated area through cultivation or other means.

Soil Preparation: The soil should be worked to the depth that is desirable for the fumigant to penetrate. Plant refuse should be worked into the soil and allowed enough time to decompose prior to treatment. Little or no plant refuse should be present on soil surface. Prior to application, the soil must be sufficiently moistened to allow seeds to swell (imbibe) in preparation for germination.

Prior to All Applications:

- Ensure that application equipment does not contain components made of natural rubber, aluminum, magnesium or their alloys.
- Soil in treatment area should be reasonably free of trash and in good tilth prior to soil treatment.
- Do not apply when soils are too wet or too dry for good agricultural practices or too hot or too cold to wet or cold soils (<55°F, or >90°F at a depth of 8 inches).

During All Applications:

- Immediately cover treated areas with a plastic tarpaulin for a minimum of 5 days.
- Allow time for complete voiding of material in the buried shanks following closure of the shutoff valve and before removing shanks from the soil.
- In the event that trash is pulled up with the shanks after completing a treatment pass, the trash must be covered with plastic film and the edges of the film buried under at least 4 inches of compacted soil before making the next pass through the field.
- Do not change cylinders when the fumigant system is under pressure. Change cylinders with all cylinder valves in the off position.

Following All Applications:

- To minimize the potential for crop injury, allow the fumigant to dissipate before planting a crop. Seeds may be used as a bioassay to determine if MIDAS 33:67 is present in the soil at concentrations sufficient to cause plant injury. DO NOT PLANT if the odor of the chloropicrin is detectable. See fumigation tables for planting requirements specific to the different application methods.
- Fumigation of highly acidic soils or those high in organic matter can cause ammonia toxicity to plants and or elevated levels of soluble salts in the soil causing phytotoxicity. Analyze soil following fumigation and fertilize as indicated. Avoid those fertilizers using ammonium salts.
- For broadcast applications, tarps must be sliced or removed before noon and only when rainfall is not expected within 12 hours. (Falling temperatures typically found in the late afternoon and evening will not promote dissipation of remaining Iodomethane under the sliced tarp and rainfall may cause remaining Iodomethane under the sliced tarp to leach into ground water.) For raised bed applications, rainfall is not a factor since planting occurs with the tarp in place and slicing or removing of tarps occurs after Iodomethane has dissipated.

MIDAS 33:67 PRE-PLANT FIELD FUMIGATION METHODS

Fumigations with MIDAS 33:67 shall only be performed in accordance with the following three application techniques: 1) Raised Bed Application, 2) Broadcast/Flat Fume Application, or 3) Deep Injection Auger Probe Application (stone fruit, nut trees, vines, and field-grown ornamentals trees and shrubs only). Application methods and rates of application for each of these methods are discussed in detail below.

RAISED BED APPLICATION

- Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of no less than 6 inches below the soil surface. The treated ground must be sealed using either:

- Soil sealing at the time of application: The treated ground must be sealed using closing shoes, roller, compaction roller, cultipacker, or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. ~~The equipment shall cover the chisel marks with soil immediately prior to placement of the tarpaulin being laid down Closing shoes and compaction roller. The closing shoes shall cover the chisel marks with soil just ahead of the compaction roller, and the tarpaulin shall be laid down simultaneously~~ (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor; or
 - Bed shaper: The chisels shall be placed with the injection point under the bed shaper, and the tarpaulin shall be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor; or
 - Combination bed former and bed shaper: The chisels shall be placed between the bed former and the bed shaper. The tractor with the tarpaulin-laying equipment shall immediately follow the application tractor.
- Injection depth of between 6 and 15 inches. The injection depth in preformed beds must not be below the bed furrow.
 - Injection spacing of 12 inches or less typically performed with a multiple shank applicator.
 - Planting shall not occur for at least 10 days after application (refer to RAISED BED SOIL FUMIGATION TABLE below).

Application Rates for Raised Bed Fumigation: Rates in the table below are given in pounds of MIDAS 33:67 per broadcast acre. The amount of product applied will be proportionate to the row spacing and width of the raised bed. To calculate the amount of product to be applied, multiply the application rate in lbs MIDAS 33:67/broadcast acre by the appropriate modifier from the Field Rate Modifier Table provided below.

RAISED BED SOIL FUMIGATION TABLE		
Crop	MIDAS 33:67 Per Broadcast Acre ¹	Time Between ² Application and Planting
Field-Grown Ornamentals Peppers Strawberries Tomatoes	Standard <u>TarpFilm</u> 300 - 530 lbs/Broadcast Acre (19.9 – 35.1 gal/Broadcast Acre)	10 – 14 days ^{2, 3}
	Highly Retentive Film⁴ 175-250 lbs/Broadcast Acre 11.6 – 16.6 gal/Broadcast Acre	14 – 21 days when using highly retentive film ^{4, 5}

NOTE:

¹ For fields infested with Nutsedge and Malva, apply a minimum of 450 lbs/broadcast acre (29.8 gal/acre) of MIDAS 33:67 with standard film and 250 lbs/broadcast acre (16.6 gal/acre) with highly retentive film.

² If tarps are cut for removal before planting, aerate a minimum of 24 hours after tarps are cut before removing tarps. Wait at least 5 days after application before cutting standard tarps. Wait at least 10 days after application before cutting highly retentive films.

²³ Use the longer planting restriction period under conditions of high soil moisture, heavy soils, or rain, ~~or persistence of chloropicrin odor in the soil.~~

³ Contact your Arysta LifeScience representative for film selection and rate reduction recommendations and approved films. If standard tarpaulins are NOT removed, planting can occur a minimum of 10 days after application, which includes the minimum 24 hours of aeration once the tarps have been cut. If tarpaulins are not cut or aerated prior to planting, the odor of chloropicrin must not be detectable. If odor of chloropicrin is detectable, wait a minimum of 14 days before planting to avoid possible plant injury.

⁴ Use of highly retentive films (e.g. VIF and approved Metallic) will require a rate reduction of up to 40-50% of the maximum use rate. Contact your Arysta LifeScience representative for film selection and rate reduction recommendations.

⁶⁴ If highly retentive films are not removed, planting can occur a minimum of 14 days after application, which

includes the minimum 24 hours of aeration once the tarps have been cut. If the tarpaulins are not cut or aerated, prior to planting, the odor of chloropicrin must not be detectable. If odor of chloropicrin is detectable, wait a minimum of 21 days before planting to avoid possible plant injury.

Field Rate Modifier Table for Raised Bed Applications

Row Spacing (inches)	Bed Width (inches)	Field Rate Modifier
72	40	0.55
72	36	0.50
72	32	0.44
72	30	0.42
72	28	0.39
66	32	0.48
66	30	0.45
66	28	0.42
66	24	0.36
60	30	0.50
60	28	0.47
48	28	0.58

BROADCAST / FLAT FUME APPLICATION FUMIGATION

- Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of 6 to 15 inches below the soil surface.
 - ~~Soil sealing at time of application: Closing shoes and compaction roller:~~ The treated ground must be sealed using closing shoes, roller, and compaction roller, cultipacker or other equivalent equipment that will sufficiently cover chisel marks left after soil injection. The equipment shall cover the chisel marks with soil immediately prior to placement of the tarpaulin being laid down. The closing shoes shall cover the chisel marks with soil just ahead of the compaction roller, and the tarpaulin shall be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor.
- Planting shall not occur for at least 10 days after application. ~~(refer to BROADCAST / FLAT FUME APPLICATION TABLE).~~

~~This product may be applied by broadcast/flat fume application with standard polyethylene films or highly retentive films, as they become available. Contact your Arysta LifeScience North America representative for information on film selection and rate reduction recommendations.~~

- ~~at rates in the following table:~~

Application Rates for Broadcast or Flat Fumigation

APPLICATION RATES FOR BROADCAST / FLAT FUME APPLICATION TABLE FUMIGATION WITH STANDARD TARPS

Crop	MIDAS 33:67 Per Acre ¹	Time Between Application and Planting ²
Field-Grown Ornamentals	300 – 530 lbs/Acre	10 – 14 days

APPLICATION RATES FOR BROADCAST / FLAT FUME APPLICATION TABLE FUMIGATION WITH STANDARD TARPS

Crop	MIDAS 33:67 Per Acre ¹	Time Between Application and Planting ²
Peppers Strawberries Tomatoes Turf	(19.9 – 35.1 gal/Acre)	
Stone Fruits (Apricot, Sweet Cherry, Tart Cherry, Nectarine, Peach, Plum, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot, Fresh Prune) Tree Nuts (Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (Hazelnut), Hickory Nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Black Walnut, English Walnut) Vines (Table, Raisin and Wine Grape)	360- 530 lbs/Acre (23.8 – 35.1 gal/Acre)	10 – 14 days ²
Nurseries (including strawberries, stone fruits, tree nuts and conifer trees)	530 lbs/Acre (35.1 gal/Acre)	10 – 14 days ²

NOTE:

¹ For fields infested with Nutsedge and Malva apply a minimum of 300 lbs/acre (~~18.9~~19.9 gal/acre) of MIDAS 33:67.

² Wait at least 5 days after application before cutting tarps. Aerate a minimum of 24 hours after tarps are cut before removing tarps. If tarpaulins are removed, planting can occur 10 days after application, which includes the minimum 5-day treatment period before tarps are cut plus the minimum of 24 hours of aeration after tarps are cut and before they are removed. Use the longer planting interval restriction period under conditions of high soil moisture, heavy soils, or rain, or persistence of chloropicrin odor in the soil.

Application Rates for Broadcast/Flat Fume Fumigation with Highly Retentive Films

Contact your Arysta LifeScience North America representative for information on film selection and rate reduction recommendations for highly retentive film. Applications using highly retentive film shall not exceed 300 lbs/Acre (19.9 gal/Acre).

Cutting and Removal of Highly Retentive Films for Broadcast/Flat Fume Applications

- Do not cut highly retentive films until at least 10 days following the application. Wait a minimum of 14 days after application before planting.

Tarpaulin Cutting and Removal for Broadcast / Flat Fume Applications: Following the completion of the application of MIDAS 33:67, the tarpaulin shall not be cut for a minimum of 5 days (120 hours) following completion of injection to the application block.

- If the When tarpaulins is are removed from the field, removal shall begin no sooner than 24 hours after tarpaulin cutting has been completed (a task which cannot occur until a minimum of 510 days after application, as stated above).
- Planting shall not occur for at least 14 days after application.

PREPLANT DEEP INJECTION AUGER-PROBE APPLICATION

For Stone Fruits, Tree Nuts, Vines, and Field Grown Ornamental Trees and Shrubs, use 2 lbs of MIDAS 33:67 per injection site, typically to a depth of between 18 to 36 inches below the soil surface, though deeper injections may be made as appropriate. Use 1 injection site per 100 square feet (i.e., one injection site every 10 feet in a standard grid pattern). Planting or replanting of Stone Fruits, Tree Nuts, Vines, and Field-Grown Ornamentals Trees and Shrubs may begin 14 days after treatment. DO NOT PLANT if the odor of chloropicrin is detectable.

Do not treat more than 230 trees/shrubs/vines per acre per day.

Buffer Zones

- 25 feet if the application rate is less than 150 lbs MIDAS 33:67 per acre.
- 50 feet if application rate is 150 to 379 lbs MIDAS 33:67 per acre, and
- 100 feet if the application rate is 380 to 530 lbs MIDAS 33:67 per acre.

ROTATIONAL CROPS

There are no crop rotation restrictions.

FOOD CROP ROTATION RESTRICTIONS

Food crops other than strawberry, tomatoes and peppers require a 4 month plant back rotation restriction from the date of fumigant application. Crop rotation to non-food crops or non-bearing fruit or nut trees is not restricted.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store in a dry, cool, well-ventilated area under lock and key. When appropriate to prevent tipping, store cylinders upright, secured to a rack or wall. Post as a pesticide storage area.

Handling: Product cylinders shall not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging or sliding. Do not use rope slings, hooks, tongs, or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured.

Do not remove valve protection bonnet and safety cap until immediately before use. When cylinder is not in use, close valve by turning clockwise until hand tight, screw safety cap onto valve outlet, and replace protection bonnet.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Return of Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

This pesticide container, whether full or partially used, is the property of the manufacturer or distributor where it was purchased and must be returned to the distributor of origin. Do not ship containers without safety caps or valve protection bonnets. Containers shall never be refilled by the consumer or used for any other product or purpose.

FOR 24-HOUR CHEMICAL EMERGENCY (spill, leak, fire or accident) ASSISTANCE:

Call CHEMTREC at 1-800-424-9300

Warranty and Disclaimer Statement

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America, LLC-Corporation ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF ARYSTA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.**

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF ARYSTA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT ARYSTA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.

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MIDAS® and the Midas logo are registered trademarks of Arysta LifeScience North America, LLC

Arysta LifeScience and the Arysta LifeScience logo are registered trademarks of Arysta LifeScience, LLC



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

66330-59

Date of Issuance:

SEP 29 2008

NOTICE OF PESTICIDE:

☒ Registration
☐ Reregistration
(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

MIDAS™ 33:67

Name and Address of Registrant (include ZIP Code):

Arysta LifeScience North America Corporation
15401 Weston Parkway, Suite 150
Cary, NC 27513

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA Sec. 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/registration review of your product when the Agency requires all registrants of similar products to submit such data.
2. Provide a product training/stewardship program using criteria agreed upon with the Agency.
3. Satisfy any additional data requirements and add any additional risk mitigation as required by the Agency once the Agency makes a decision for the soil fumigant group.
4. Submit a label amendment within the same timeframe imposed on other soil fumigant registrants for similar label amendments.

The labeling subject to this conditional registration is the labeling accepted on October 11, 2007.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA Sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

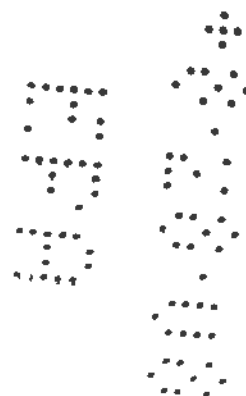
Signature of Approving Official:

Mary L. Waller

Mary L. Waller, Product Manager (21)
Fungicide Branch, Registration Division (7505P)

Date:

9/29/2008



Ms. Mary Waller
Product Management Team (21)
Fungicide-Herbicide Branch (117505C)
Registration Division
Office of Pesticide Programs
Document Processing Desk (APPL)
U.S. Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202

Subject: Iodomethane Technical, EPA Reg. No. 66330-44; MIDAS®98:2, EPA Reg. No. 66330-43; MIDAS®50:50, EPA Reg. No. 66330-57; MIDAS®33:67, EPA Reg. No. 66330-59; MIDAS®25:75, EPA Reg. No. 66330-42; MIDAS®EC Gold, EPA Reg. No. 66330-60; and MIDAS®EC Bronze, EPA Reg. No. 66330-58

Mary Waller:

Arysta LifeScience North America LLC, respectfully requests that EPA extend the time-limited registration of Iodomethane Technical, EPA Reg. No. 66330-44; and all associated end use products MIDAS®98:2, EPA Reg. No. 66330-43; MIDAS®50:50, EPA Reg. No. 66330-57; MIDAS®33:67, EPA Reg. No. 66330-59; MIDAS®25:75, EPA Reg. No. 66330-42; MIDAS®EC Gold, EPA Reg. No. 66330-60; and MIDAS®EC Bronze, EPA Reg. No. 66330-58 to December 31, 2013. These registrations currently expire on October 5, 2008.

This date is being proposed as EPA has stated on page 25 of the recently issued draft Reregistration Eligibility Decision (RED) for Chloropicrin dated July 9, 2008 that "*EPA plans to move the soil fumigants forward in Registration Review, from 2017 to 2013, which will allow EPA to consider new data and information relatively soon, determine whether the mitigation included in this decision is effectively addressing the risks as EPA believes it will, and to include other soil fumigants which are not part of the current fumigant group review.*" We believe the date of December 31, 2013 is the most appropriate as iodomethane will be going through a data review at that time along with all other fumigants.

In the interim, Arysta commits to comply with all agreed and appropriate label call-in criteria as determined in the final RED for Chloropicrin as applicable to the premix products containing both chloropicrin and iodomethane.

Please note that MIDAS products are now registered in 46 states in the US, but all of these state registrations are contingent on the US EPA registration being renewed. As we discussed by telephone on August 27, there is some concern from our customers as to whether we will be able to get the product registrations extended. This concern is aided by our competitors. Consequently, Arysta requests that EPA grant an extension for these



registrations no later than **September 15, 2008**; in order to avoid a lapsing of the follow-on Iodomethane/MIDAS state registrations.

Thanks in advance for your consideration of this time extension. Should you have any concerns or questions, do not hesitate to contact me at 865-850-3824; or at becky.rhodes@arystalifescience.com.

Sincerely,

Becky Rhodes

Becky Rhodes
Head of Regulatory Affairs

CC: Cynthia Giles-Parker
Kathy Monk
Lois Rossi
Debbie Edwards



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

OCT 11 2007

Ms. Becky Rhodes
Arysta LifeScience North America Corporation
15401 Weston Parkway, Suite 150
Cary, NC 27513

Subject: Midas 33:67
EPA Registration Number 66330-59
Amendment dated October 11, 2007

Dear Ms. Rhodes:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended is acceptable. One copy of the label stamped "Accepted" is enclosed for your records. Please submit one copy of the final printed label before the product is released for shipment.

If you have any questions, you may contact me at (703) 308-9354 or via email at waller.mary@epa.gov.

Sincerely,

A handwritten signature in cursive script, reading "Mary L. Waller", is positioned above the typed name and title.

Mary L. Waller
Product Manager (21)
Fungicide Branch
Registration Division (7505P)

Enclosure

ACCEPTED

10/11/2007

MIDAS® 33:67 Label Version (9) 10-11-07
Page 1 of 14

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 66330-59

**RESTRICTED USE PESTICIDE
DUE TO ACUTE TOXICITY**

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

MIDAS® 33:67

Only For Pre-Plant Fumigations of Fields Intended for Commercial Production of Listed Crops and Field-Grown Ornamentals, for the Control of Soil-Borne Pests Including Weed Seeds, Nematodes, Insects, and Diseases.

ACTIVE INGREDIENTS:

Iodomethane 32.93%

Chloropicrin 66.67%

OTHER INGREDIENTS: 0.40%

TOTAL: 100.00%

One gallon weighs 15.1 pounds (5.0 pounds Iodomethane and 10.1 pounds Chloropicrin).

**KEEP OUT OF REACH OF CHILDREN
DANGER / PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail).

FIRST AID

If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person.

HOT LINE NUMBERS

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL:
1-866-303-6952 or 1-651-532-8946

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage. Symptoms of overexposure may include irritation to eyes, skin, and respiratory system, shortness of breath, nausea, vomiting, dizziness, ataxia, slurred speech, drowsiness, blurred vision, staggering gait and mental imbalance, with probable recovery after period of no exposure. Treatment is symptomatic.

EPA Reg. No. 66330-59
EPA Est. No.

For Product Information Call: 1-866-761-9397

Net Contents:

Manufactured for
Arysta LifeScience North America Corporation
15401 Weston Parkway, Suite 150
Cary, NC 27513

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

Danger. Corrosive. Causes irreversible eye damage. Corrosive to skin. Causes skin burns. May be fatal if inhaled or swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin or on clothing. Do not breathe vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SPECIAL NOTE: This product contains chloropicrin, a poisonous liquid or vapor. Inhalation of vapors may be fatal. Chloropicrin is readily identified by smell. Exposure to very low concentrations of vapor will cause irritation of eyes, nose and throat. Continued exposure after irritation is evident or higher concentrations may cause painful irritation to the eyes or temporary blindness. Liquid will cause chemical burns to skin or eyes. Do not get on skin, in eyes, or on clothing. Chloropicrin fumigant has the capacity to cause marked irritation to the upper respiratory tract and is a strong lachrymator (tear producing eye irritant). Low concentrations, below those necessary to cause serious systemic intoxication, are capable of causing severely painful eye irritation, hence will not be voluntarily tolerated. However, the effect may be so powerful that a person may become temporarily blinded and panic-stricken and that in turn may lead to accidents.

AIR CONCENTRATION LEVEL

Air concentrations of chloropicrin are measured with direct reading colorimetric detector devices, such as Kitagawa tubes, certified for chloropicrin at 0.1 to 16 ppm. Persons involved in the application of MIDAS® 33:67 or in reentry into treated fields must wear an air-purifying respirator when required by the restrictions given in the AGRICULTURAL USE REQUIREMENTS section below. In case of spills or leaks, additional respiratory protection must be worn as detailed under Spill and Leak Procedures.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers (to include tractor drivers, co-pilots, shovelers, and tarp monitors must wear:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection is required. DO NOT wear goggles.
- An air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C). For tractor drivers and co-pilots the following can be used in lieu of an air-purifying respirator:
 - A tractor equipped with a working-area air-fan dilution system consisting of a ducted fan/blower which provides air flow to the breathing zone of the tractor driver and co-pilot. The fan/blower must be mounted so that the fan/blower intake is at least 126 inches from the ground, and the fan/blower must be capable of operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.

Other handlers (to include planters, hole punchers, tarp cutters, tarp removers, and tarp remover drivers must wear:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection is required. DO NOT wear goggles.

ENGINEERING CONTROL REQUIREMENTS

MIDAS 33:67 must be transferred through connecting hoses, pipes, and/or couplings sufficiently tight to prevent workers or other persons from coming in contact with the liquid.

- All hoses, piping, and tanks used in connection with this product shall be of a type appropriate for use under the pressure and vacuum conditions to be encountered.
- External sight gauges, if applicable, shall be equipped with valves so that pipes to sight gauge can be shut off in case of breakage or leakage.
- The mechanical transfer system must be adequate to make necessary measurements of the pesticide being used.
- Shut-off devices must be installed on the exit end of all cylinder connections and at all disconnect points to prevent leakage of product when the transfer is stopped and hose is removed or disconnected.
- The pressure in hoses used to move the product must not exceed the manufacturer's maximum pressure specifications.
- Check equipment to ensure good condition and integrity prior to each use.

User Safety Requirements

- Do not wear jewelry, gloves, goggles, tight clothing or any rubber protective clothing/boots that can trap iodomethane or chloropicrin vapors against your skin. Iodomethane and chloropicrin vapors can be trapped inside clothing and cause skin injury.
- Remove all clothing that comes in contact with liquid material at once.
- Aerate all affected clothing thoroughly outdoor prior to washing with hot water and detergent.
- Discard any clothing or absorbent materials (e.g. leather), that have been drenched or heavily contaminated with this product. Do not reuse them.

- **Respirator Requirements:** When a respirator is required for use with this product, the following criteria must be met consistent with the Worker Protection Standard: (a) Cartridges or canisters must be replaced daily or when odor or irritation from this product becomes apparent, whichever is sooner; (b) Respirators must be fit-tested and fit-checked using a program that conforms to OSHA's requirements (described in 29 CFR Part 1910.134); (c) Respirator users must be trained using a program that conforms to OSHA's requirements (described in 29 CFR Part 1910.134); (d) Respirator users must be examined by a qualified medical practitioner to ensure physical ability to safely wear the style of respirator to be worn.
- Follow PPE manufacturer's instructions for cleaning/maintaining protective eyewear and respirators.

USER SAFETY RECOMMENDATIONS

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside, then wash skin thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat, open flames, or sparking electrical equipment. Do not use application devices containing natural rubber, aluminum, magnesium or their alloys.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only Certified Applicators (certified by both the state and Arysta) trained in the proper handling, worker protection, and application of MIDAS 33:67 soil fumigant and workers under their direct supervision may be present in the treatment area during application. An Arysta and state Certified Applicator must be on site and within the line of sight to observe handlers during the application. Handling tasks to be performed under the direct supervision of a Certified Applicator include, but are not limited to the tractor driver, co-pilot, tarp dispenser and shoveler. All such handlers must have appropriate protective equipment, as described in the PERSONAL PROTECTIVE EQUIPMENT section. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Buffer Zone

The area adjacent to the treated area is referred to as the buffer zone. The buffer zone shall extend from the edge of the treated area in all directions. See Buffer Zone Table. The minimum buffer zone distance shall be 25 feet.

The Certified Applicator supervising the soil fumigation is responsible for the following:

1. Calculating the appropriate size of the buffer zone that must be maintained during the first 48 hours following the end of the application;

2. Establishing and maintaining the buffer zone during the 48 hours following the end of the application; and
3. Ensuring that unprotected workers and bystanders do not enter the buffer zone during the 48 hours following the end of the application. Exception: Unprotected workers and bystanders may travel through (but not engage in any activity in) the buffer zone during the 48-hour period, provided their total exposure time in any 24-hour period is 15 minutes or less. However, travel by unprotected workers or bystanders through the fumigated area itself is prohibited during the entire 5-day Entry Restricted period. Handlers protected with Personal Protective Equipment (PPE) required for early entry into a treated area may work in buffer zones.
4. Ensuring application site has a distinctive buffer zone. The buffer zone of the field to be treated cannot overlap the buffer zone of another field treated within the last 48 hours.
5. The Certified Applicator supervising the soil fumigation must document how the buffer zone was determined, the location of unoccupied sensitive sites within ¼ mile of the fumigated area, and how persons in occupied structures located within the buffer zone were protected. These records must be maintained by the Certified Applicator and by the owner/operator of the fumigated site for at least two years following the fumigation and must be made available, upon request to Federal, State, Tribal, and local enforcement personnel.

Determining Buffer Zone Distance

- Determine the size of the buffer zone using the following Buffer Zone Table.
- The size of the buffer zone will be dependant on the following three factors:
 - The number of field acres that are being treated with MIDAS 33:67.
 - The pounds of MIDAS 33:67 that are being applied per treated acre.
 - Buffer zone reduction credits

Buffer Zone Table

MIDAS 33:67 Application Rate (Lbs per Treated Acre) ⁴	SIZE OF FIELD IN ACRES (Buffer zone distance in feet) ^{1,2}							
	Up to 5 Acres	6 – 10 Acres	11-15 Acres	16- 20 Acres	21-25 Acres	26-30 Acres	31-35 Acres	36-40 ³ Acres
100	25	25	45	60	70	80	90	95
150	25	30	60	85	100	115	130	145
175	25	35	70	100	120	135	150	165
200	25	40	80	115	135	155	175	190
250	25	50	95	140	165	190	215	235
300	30	60	115	170	200	230	260	285
350	35	70	135	200	235	265	300	330
360	35	70	140	205	240	275	310	340
400	40	75	150	225	265	305	345	380
500	50	95	190	285	335	380	430	475
530	50	100	200	300	350	400	450	500

1. For rates not listed on this table, use the buffer zone for the next highest rate, or use the following calculation to determine the exact buffer zone:

$$\text{Buffer Zone for Application Rate Not Listed} = \frac{\text{Known Buffer Zone on Table} \times \text{Application Rate Not Listed}}{\text{Rate of Application for Known Buffer Zone}}$$

2. Buffer Zone Reduction Credits:

Reduce buffer zone by 10% for each factor listed below:

- Use of flat fume / broadcast application
- Use of High Barrier films. High Barrier films for which credit can be applied must be on an Arysta approved list. Examples of Arysta approved films are Canslit Brand Metalized 1.3 ml, Pliant Blockade® VIF 1.25 ml, or Pliant Metalized 1.0-1.25.
- Application to soils having >3% organic matter Refer to the USDA or USGS Soil Survey Maps for the treated area that identify the range of organic matter and / or a documented soil survey report that lists range of % organic matter for the treated area. Collection of samples for analysis of soil in the treated area should follow procedures as per USDA's Natural Resource Conservation Services methods. Information on soil sampling can be found at www.soil.usda.gov.
- Use of flat fume / broadcast application

For example, if the Buffer Zone is 50 feet and the application qualifies for a buffer zone reduction credit such as use of Metalized film, then the buffer zone can be reduced by 10%, i.e. reduced by 5 feet based on the following calculation: 50 ft – (50 ft X 10%) = 45 feet.

If the application qualifies for two buffer zone reduction credits such as use of high barrier film and soil with >3% organic matter, then the buffer zone can be reduced by 20%, i.e. reduced by 10 feet based on the following calculation: 50 ft – (50 ft X 20%) = 40 feet.

3. Applications are limited to 40 contiguous acres or less per day on a single site.
4. For raised bed applications, the treated area is the raised bed not the untreated furrows. As an example, if a raised bed field is 50% raised bed (treated) and 50% furrow (untreated), and 350 lbs of MIDAS 33:67 is applied to the field, then the effective application rate to the treated raised bed is 350 lbs per treated acre; and that is the rate that would determine the buffer zone.

Note: Minimum allowable buffer zone is 25 feet regardless of buffer zone reduction credits.

Buffer Zone for Pre-Plant Deep Injection Auger

- 25 feet if the application rate is less than 150 lbs MIDAS 33:67 per acre.
- 50 feet if application rate is 150 to 379 lbs MIDAS 33:67 per acre, and
- 100 feet if the application rate is 380 to 530 lbs MIDAS 33:67 per acre.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), restricted entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

Entry Restrictions

Entry into the treated area (including early entry that would otherwise be permitted under the WPS) by any person, other than a correctly trained and equipped handler who is performing a task that is permitted by this labeling, is **PROHIBITED** from the start of the application until 5 days after application and the air concentration of chloropicrin is measured to be less than 0.1 ppm. Early entry under the WPS is limited to tarp inspection and repair. Non-handler entry is prohibited while tarps are being removed. See the Buffer Zone section for additional Entry Restrictions.

Notification at Entrances to Treated Areas

Notify all workers of the fumigation verbally and by posting warning signs at all likely entrances to the treated area for no less than 5 days after application. The signs must bear the skull and crossbones symbol and state:

- (1) "DANGER/PELIGRO"
- (2) "Areas under fumigation, DO NOT ENTER/NO ENTRE"
- (3) Iodomethane and Chloropicrin Fumigants In Use
- (4) Date and time of fumigation
- (5) MIDAS 33:67
- (6) Name, address, and telephone number of the Certified Applicator in charge of the application.

Post these fumigant warning signs for treated areas instead of the WPS signs for these applications but follow all WPS requirements pertaining to location, legibility, size and timing of posting and removal.

PPE for Reentry during the Entry-Restricted Period

The PPE required for reentry during the entry-restricted period are:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- An air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C).

GENERAL INFORMATION AND INSTRUCTIONS

This fumigant is a highly hazardous material. All uses of this fumigant are covered under the Worker Protection Standard, and must be conducted in accordance with all of the requirements of the Worker Protection Standard (40 CFR Part 170). It is a restricted use pesticide that must only be used by or under the direct supervision of individuals trained and certified in its proper use. Before using, read the entire label and follow all use directions and precautions. All persons working with this fumigant must be knowledgeable about the hazards and trained in the use of required air-purifying respirator equipment and detector devices, emergency procedures and proper use of the fumigant.

GENERAL USE PRECAUTIONS

- Follow all local government instructions for posting of treated areas and post all treated areas with warning signs.
- Comply with all local ordinances and regulations.
- Do not apply within ¼ mile of any occupied sensitive site such as schools, day care facilities, nursing homes, hospitals, prisons, and playgrounds.
- Applications are limited to 40 contiguous acres or less per day on a single site. .
- Do not apply this product in the presence of ground fog, inversion layers or when the potential for an inversion layer is likely to occur as this may result in product drift outside the treated area. A smoke generator can be used to indicate the presence of an inversion layer if the smoke column does not rise in a vertical pattern. In addition, consult the local weather forecast in the surrounding region for reports of expected inversion layers the day of application and within the 24 hour period following applications of MIDAS 33:67.
- Never fumigate alone. A minimum of two trained employees must be present during handling and application of soil fumigants.
- Certified Applicators are responsible for providing information to all workers involved with the fumigation about precautions and procedures in the safe handling, worker protection and application of MIDAS 33:67 for soil fumigation.
- Additional instructions must be made available to workers in the mechanical operation of the tractor and how to safely work with the operator while fumigating.
- Always handle this product in the open, with all workers positioned "upwind" from the container and/or where there is adequate ventilation.
- Check the fumigation system for leaks or worn out equipment prior to soil injection.
- When fumigating from a tractor, it is required that 5 gallons of water be carried on the tractor and readily available for rinsing and cleaning purposes. An additional 5 gallons of water must be available in the service truck. This water must be potable and in containers marked "Decontamination water not to be used for drinking.
- For broadcast/flat fume applications, keep all pets, livestock and other domestic animals out of the treated areas until tarps have been removed.
- For raised bed applications, keep all pets, livestock and other domestic animals out of the treated areas for 5 days and/or until the air concentration for chloropicrin is less than 0.1 ppm at the edge of the treated area. Most raised bed applications will not result in tarp removal.
- Tarp removal requires a minimum of two trained employees to be present during the operation. Non-handler personnel are prohibited from being present during tarp removal.
- See AGRICULTURAL USE REQUIREMENTS box for details regarding posting and placement of warning signs.
- Do not allow entry by unprotected persons into the fumigated area until the re-entry signs are removed. Such signs must only be removed when the air concentration of chloropicrin is measured to be less than 0.1 ppm at the edge of the treated area and no sooner than 5 days following

application. Signs must remain legible during entire posting period. Also, do not cut tarps for planting until these conditions have been met.

- To determine whether aeration is complete, each fumigated site must be tested and shown to contain less than 0.1 ppm chloropicrin in the air space around the treated site as determined by 3 consecutive measurements taken at the down wind edge of the treated site at least 15 minutes apart.

SPILL AND LEAK PROCEDURES

- Cease all operations if any leak develops in the fumigation system.
- Evacuate everyone from the immediate areas of the spill or leak.
- Approach the area from the upwind side. Work upwind to repair leak(s), if possible.
- For entry into the area to correct the problem, trained personnel must wear loose fitting or well ventilated long-sleeved shirt and long pants, shoes plus socks and either (a) a supplied-air respirator (MSHA/NIOSH approval number prefix TC-19C) or (b) a self-contained breathing apparatus (SCBA)(MSHA/NIOSH approval number prefix TC-13F).
- Only correctly trained and PPE-equipped handlers are permitted to enter. Do not permit entry into the spill or leak area by any other person until the concentration of chloropicrin is measured to be less than 0.1 ppm as specified in section above.
- Allow spilled fumigant to evaporate or to absorb onto vermiculite, dry sand, earth, or similar absorbent material. Such material should be disposed of on site or at an approved disposal facility.
- Contaminated soil, water and other cleanup debris may be hazardous waste. Report any spill that exceeds 302 lbs (20 gallons of product) to the National Response Center at 1-800-424-8802.

PROCEDURES PRIOR TO, DURING AND AFTER ALL APPLICATIONS

CONTROL OF SOIL BORNE PESTS: MIDAS 33:67 controls soil-borne pests including nematodes, insects, weed seeds, and diseases.

Midas 33:67 will control the following pests when present in soil at the time of treatment:

Weed Seeds, including broadleaf weeds such as nutsedge, pigweed, broomrape and lambsquarters, and grasses such as bermudagrass, and annual bluegrass. Effectiveness against hard seed weeds, such as mallow, dodder, morning glory, and certain leguminous weeds may be variable.

Plant-parasitic Nematodes, such as root-knot, root lesion (meadow), cyst, citrus, burrowing, false root-knot, lance, spiral, ring, sting, stubby root, dagger, awl, sheath and stung (stylet) nematodes.

Soil-borne Insects, such as wireworms, cutworms, grubs, rootworms, ants and garden symphylans.

Soil-borne Diseases, such as *Verticillium*, *Pythium*, *Rhizoctonia*, *Phytophthora*, and *Fusarium*.

MIDAS 33:67 is not to be used as a preventative treatment for pests that may be introduced after the fumigant has been applied and/or tarps removed. To reduce the potential for the re-introduction of pests (nematodes, weed seed and disease); avoid the use of irrigation water, transplants or equipment that could carry pests into the planting area. Avoid moving infested soil back into the treated area through cultivation or other means.

Soil Preparation: The soil should be worked to the depth that is desirable for the fumigant to penetrate. Plant refuse should be worked into the soil and allowed enough time to decompose prior to treatment. Little or no plant refuse should be present on soil surface. Prior to application, the soil must be sufficiently moistened to allow seeds to swell (imbibe) in preparation for germination.

Prior to All Applications:

- Ensure that application equipment does not contain components made of natural rubber, aluminum, magnesium or their alloys.
- Soil in treatment area should be reasonably free of trash and in good tilth prior to soil treatment.
- Do not apply to wet or cold soils (<55°F at a depth of 8 inches).

During All Applications:

- Immediately cover treated areas with a plastic tarpaulin for a minimum of 5 days.
- Allow time for complete voiding of material in the buried shanks following closure of the shutoff valve and before removing shanks from the soil.
- In the event that trash is pulled up with the shanks after completing a treatment pass, the trash must be covered with plastic film and the edges of the film buried under at least 4 inches of compacted soil before making the next pass through the field.
- Do not change cylinders when the fumigant system is under pressure. Change cylinders with all cylinder valves in the off position.

Following All Applications:

- To minimize the potential for crop injury, allow the fumigant to dissipate before planting a crop. Seeds may be used as a bioassay to determine if MIDAS 33:67 is present in the soil at concentrations sufficient to cause plant injury. DO NOT PLANT if the odor of the chloropicrin is detectable. See fumigation tables for planting requirements specific to the different application methods.
- Fumigation of highly acidic soils or those high in organic matter can cause ammonia toxicity to plants and or elevated levels of soluble salts in the soil causing phytotoxicity. Analyze soil following fumigation and fertilize as indicated. Avoid those fertilizers using ammonium salts.

MIDAS 33:67 PRE-PLANT FIELD FUMIGATION METHODS

Fumigations with MIDAS 33:67 shall only be performed in accordance with the following three application techniques: 1) Raised Bed Application, 2) Broadcast/Flat Fume Application, or 3) Deep Injection Auger Probe Application (stone fruit, nut trees, vines, and field-grown ornamental trees and shrubs only). Application methods and rates of application for each of these methods are discussed in detail below

RAISED BED APPLICATION

- Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of no less than 6 inches below the soil surface. The treated ground must be sealed using either:
 - Closing shoes and compaction roller: The closing shoes shall cover the chisel marks with soil just ahead of the compaction roller, and the tarpaulin shall be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor; or
 - Bed shaper: The chisels shall be placed with the injection point under the bed shaper, and the tarpaulin shall be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor; or
 - Combination bed former and bed shaper: The chisels shall be placed between the bed former and the bed shaper. The tractor with the tarpaulin-laying equipment shall immediately follow the application tractor.
- Injection depth of between 6 and 15 inches. The injection depth in preformed beds must not be below the bed furrow.
- Injection spacing of 12 inches or less typically performed with a multiple shank applicator.
- Planting shall not occur for at least 10 days after application (refer to RAISED BED SOIL FUMIGATION TABLE below).

BROADCAST / FLAT FUMIGATION

- Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of 6 to 15 inches below the soil surface.
 - Closing shoes and compaction roller: The treated ground must be sealed using closing shoes and compaction roller. The closing shoes shall cover the chisel marks with soil just ahead of the compaction roller, and the tarpaulin shall be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor.
- Planting shall not occur for at least 10 days after application (refer to BROADCAST / FLAT FUME APPLICATION TABLE).
- This product may be applied by broadcast/flat fume application with standard polyethylene films or highly retentive films, as they become available. Contact your Arysta LifeScience North America representative for information on film selection and rate reduction recommendations.

Application Rates for Broadcast or Flat Fumigation

BROADCAST / FLAT FUME APPLICATION TABLE		
Crop	MIDAS 33:67 Per Acre¹	Time Between Application and Planting
Field-Grown Ornamentals Peppers Strawberries Tomatoes Turf	300 – 530 lbs/Acre (19.9 – 35.1 gal/Acre)	10 – 14 days
Stone Fruits (Apricot, Sweet Cherry, Tart Cherry, Nectarine, Peach, Plum, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot, Fresh Prune) Tree Nuts (Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (Hazelnut), Hickory Nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Black Walnut, English Walnut) Vines (Table, Raisin and Wine Grape)	360- 530 lbs/Acre (23.8 – 35.1 gal/Acre)	10 – 14 days ²
Nurseries (including strawberries, stone fruits, tree nuts and conifer trees)	530 lbs/Acre (35.1 gal/Acre)	10 – 14 days ²
NOTE: ¹ For fields infested with Nutsedge and Malva apply a minimum of 300 lbs/acre (18.9 gal/acre) of MIDAS 33:67. ² If tarpaulins are removed, planting can occur 10 days after application, which includes the minimum 5-day treatment period before tarps are cut plus the minimum of 24 hours of aeration after tarps are cut and before they are removed. Use the longer planting restriction period under conditions of high soil moisture, heavy soils, or rain or persistence of chloropicrin odor in the soil.		

Tarpaulin Cutting and Removal for Broadcast / Flat Fume Applications: Following the completion of the application of MIDAS 33:67, the tarpaulin shall not be cut for a minimum of 5 days (120 hours) following completion of injection to the application block.

If the tarpaulin is removed from the field, removal shall begin no sooner than 24 hours after tarpaulin cutting has been completed (a task which cannot occur until a minimum of 5 days after application, as stated above).

PREPLANT DEEP INJECTION AUGER-PROBE APPLICATION

For Stone Fruits, Tree Nuts, Vines, and Field Grown Ornamental Trees and Shrubs, use 2 lbs of MIDAS 33:67 per injection site, typically to a depth of between 18 to 36 inches below the soil surface, though deeper injections may be made as appropriate. Use 1 injection site per 100 square feet (i.e., one injection site every 10 feet in a standard grid pattern). Planting or replanting of Stone Fruits, Tree Nuts, Vines, and Field-Grown Ornamentals may begin 14 days after treatment. DO NOT PLANT if the odor of chloropicrin is detectable.

Do not treat more than 230 trees/shrubs/vines per acre per day.

- 25 feet if the application rate is less than 150 lbs MIDAS 33:67 per acre.
- 50 feet if application rate is 150 to 379 lbs MIDAS 33:67 per acre, and
- 100 feet if the application rate is 380 to 530 lbs MIDAS 33:67 per acre.

FOOD CROP ROTATION RESTRICTIONS

Food crops other than strawberry, tomatoes and peppers require a 4 month plant back rotation restriction from the date of fumigant application. Crop rotation to non-food crops or non-bearing fruit or nut trees is not restricted.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store in a dry, cool, well-ventilated area under lock and key. When appropriate to prevent tipping, store cylinders upright, secured to a rack or wall. Post as a pesticide storage area.

Handling: Product cylinders shall not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging or sliding. Do not use rope slings, hooks, tongs, or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured.

Do not remove valve protection bonnet and safety cap until immediately before use. When cylinder is not in use, close valve by turning clockwise until hand tight, screw safety cap onto valve outlet, and replace protection bonnet.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Return of Containers: This pesticide container, whether full or partially used, is the property of the manufacturer or distributor where it was purchased and must be returned to the distributor of origin. Do not ship containers without safety caps or valve protection bonnets. Containers shall never be refilled by the consumer or used for any other product or purpose.

FOR 24-HOUR CHEMICAL EMERGENCY (spill, leak, fire or accident) ASSISTANCE:
Call CHEMTREC at 1-800-424-9300

Warranty and Disclaimer Statement

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America Corporation ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF ARYSTA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.**

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF ARYSTA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT ARYSTA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.

MIDAS® is a registered trademark of Arysta LifeScience North America Corporation



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

66330-59

Date of Issuance:

OCT 5 2007

NOTICE OF PESTICIDE:

☒ Registration
☐ Reregistration
(under FIFRA, as amended)

Term of Issuance:

10/5/2008

Name of Pesticide Product:

MIDAS™ 33:67

Name and Address of Registrant (include ZIP Code):

Arysta LifeScience North America Corporation
15401 Weston Parkway, Suite 150
Cary, NC 27513

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA Sec. 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product when the Agency requires all registrants of similar products to submit such data.
2. Make the following label change: Add the phrase "EPA Registration Number 66330-59".
3. Satisfy any additional data requirements and add any additional risk mitigation as required by the Agency once the Agency makes a decision for the soil fumigant group.
4. Submit a label amendment within the same timeframe imposed on other soil fumigant registrants for similar label amendments.
5. Submit one copy of the final printed label before the product is released for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA Sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

Signature of Approving Official:

Mary L. Waller, Product Manager (21)
Fungicide Branch, Registration Division (7505P)

Date:

10/5/2007

**RESTRICTED USE PESTICIDE
DUE TO ACUTE TOXICITY**

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

MIDAS® 33:67

Only For Pre-Plant Fumigations of Fields Intended for Commercial Production of Listed Crops and Field-Grown Ornamentals, for the Control of Soil-Borne Pests Including Weed Seeds, Nematodes, Insects, and Diseases.

ACTIVE INGREDIENTS:

Iodomethane 32.93%

Chloropicrin 66.67%

OTHER INGREDIENTS: 0.40%

TOTAL: 100.00%

One gallon weighs 15.1 pounds (5.0 pounds Iodomethane and 10.1 pounds Chloropicrin).

**KEEP OUT OF REACH OF CHILDREN
DANGER / PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail).

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person.
<p>HOT LINE NUMBERS</p> <p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p> <p>FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL: 1-866-303-6952 or 1-651-532-8946</p>	
<p>NOTE TO PHYSICIAN</p> <p>Probable mucosal damage may contraindicate the use of gastric lavage. Symptoms of overexposure may include irritation to eyes, skin, and respiratory system, shortness of breath, nausea, vomiting, dizziness, ataxia, slurred speech, drowsiness, blurred vision, staggering gait and mental imbalance, with probable recovery after period of no exposure. Treatment is symptomatic.</p>	

**ACCEPTED
with COMMENTS
In EPA Letter Dated:**

10/5/2007

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 268

66330-59

EPA Reg. No. 66330-
EPA Est. No.

For Product Information Call: 1-866-761-9397

Net Contents:

Manufactured for
Arysta LifeScience North America Corporation
15401 Weston Parkway, Suite 150
Cary, NC 27513

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

Danger. Corrosive. Causes irreversible eye damage. Corrosive to skin. Causes skin burns. May be fatal if inhaled or swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin or on clothing. Do not breathe vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SPECIAL NOTE: This product contains chloropicrin, a poisonous liquid or vapor. Inhalation of vapors may be fatal. Chloropicrin is readily identified by smell. Exposure to very low concentrations of vapor will cause irritation of eyes, nose and throat. Continued exposure after irritation is evident or higher concentrations may cause painful irritation to the eyes or temporary blindness. Liquid will cause chemical burns to skin or eyes. Do not get on skin, in eyes, or on clothing. Chloropicrin fumigant has the capacity to cause marked irritation to the upper respiratory tract and is a strong lachrymator (tear producing eye irritant). Low concentrations, below those necessary to cause serious systemic intoxication, are capable of causing severely painful eye irritation, hence will not be voluntarily tolerated. However, the effect may be so powerful that a person may become temporarily blinded and panic-stricken and that in turn may lead to accidents.

AIR CONCENTRATION LEVEL

Air concentrations of chloropicrin are measured with direct reading colorimetric detector devices, such as Kitagawa tubes, certified for chloropicrin at 0.1 to 16 ppm. Persons involved in the application of MIDAS® 33:67 or in reentry into treated fields must wear an air-purifying respirator when required by the restrictions given in the AGRICULTURAL USE REQUIREMENTS section below. In case of spills or leaks, additional respiratory protection must be worn as detailed under Spill and Leak Procedures.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers (to include tractor drivers, co-pilots, shovelers, and tarp monitors must wear:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection is required. DO NOT wear goggles.
- An air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C). For tractor drivers and co-pilots the following can be used in lieu of an air-purifying respirator:
 - A tractor equipped with a working-area air-fan dilution system consisting of a ducted fan/blower which provides air flow to the breathing zone of the tractor driver and co-pilot. The fan/blower must be mounted so that the fan/blower intake is at least 126 inches from the ground, and the fan/blower must be capable of operating at a minimum of 1,600 revolutions per minute and producing a minimum flow rate of 3,000 cubic feet of air per minute.

Applicators and other handlers (to include drip applicators, drip line tenders, planters, hole punchers, tarp cutters, tarp removers, and tarp remover drivers must wear:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- Full face shield or safety glasses with brow, temple and side protection is required. DO NOT wear goggles.

ENGINEERING CONTROL REQUIREMENTS

MIDAS 33:67 must be transferred through connecting hoses, pipes, and/or couplings sufficiently tight to prevent workers or other persons from coming in contact with the liquid.

- All hoses, piping, and tanks used in connection with this product shall be of a type appropriate for use under the pressure and vacuum conditions to be encountered.
- External sight gauges, if applicable, shall be equipped with valves so that pipes to sight gauge can be shut off in case of breakage or leakage.
- The mechanical transfer system must be adequate to make necessary measurements of the pesticide being used.
- Shut-off devices must be installed on the exit end of all cylinder connections and at all disconnect points to prevent leakage of product when the transfer is stopped and hose is removed or disconnected.
- The pressure in hoses used to move the product must not exceed the manufacturer's maximum pressure specifications.
- Check equipment to ensure good condition and integrity prior to each use.

User Safety Requirements

- Do not wear jewelry, gloves, goggles, tight clothing or any rubber protective clothing/boots that can trap iodomethane or chloropicrin vapors against your skin. Iodomethane and chloropicrin vapors can be trapped inside clothing and cause skin injury.
- Remove all clothing that comes in contact with liquid material at once.
- Aerate all affected clothing thoroughly outdoor prior to washing with hot water and detergent.
- Discard any clothing or absorbent materials (e.g. leather), that have been drenched or heavily contaminated with this product. Do not reuse them.

- **Respirator Requirements:** When a respirator is required for use with this product, the following criteria must be met consistent with the Worker Protection Standard: (a) Cartridges or canisters must be replaced daily or when odor or irritation from this product becomes apparent, whichever is sooner; (b) Respirators must be fit-tested and fit-checked using a program that conforms to OSHA's requirements (described in 29 CFR Part 1910.134); (c) Respirator users must be trained using a program that conforms to OSHA's requirements (described in 29 CFR Part 1910.134); (d) Respirator users must be examined by a qualified medical practitioner to ensure physical ability to safely wear the style of respirator to be worn.
- Follow PPE manufacturer's instructions for cleaning/maintaining protective eyewear and respirators.

USER SAFETY RECOMMENDATIONS

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside, then wash skin thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat, open flames, or sparking electrical equipment. Do not use application devices containing natural rubber, aluminum, magnesium or their alloys.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only Certified Applicators (certified by both the state and Arysta) trained in the proper handling, worker protection, and application of MIDAS 33:67 soil fumigant and workers under their direct supervision may be present in the treatment area during application. An Arysta and state Certified Applicator must be on site and within the line of sight to observe handlers during the application. Handling tasks to be performed under the direct supervision of a Certified Applicator include, but are not limited to the tractor driver, co-pilot, tarp dispenser and shoveler. All such handlers must have appropriate protective equipment, as described in the PERSONAL PROTECTIVE EQUIPMENT section. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Buffer Zone

The area adjacent to the treated area is referred to as the buffer zone. The buffer zone shall extend from the edge of the treated area in all directions. See Buffer Zone Table. The minimum buffer zone distance shall be 25 feet.

The Certified Applicator supervising the soil fumigation is responsible for the following:

1. Calculating the appropriate size of the buffer zone that must be maintained during the first 48 hours following the end of the application;

2. Establishing and maintaining the buffer zone during the 48 hours following the end of the application; and
3. Ensuring that unprotected workers and bystanders do not enter the buffer zone during the 48 hours following the end of the application. Exception: Unprotected workers and bystanders may travel through (but not engage in any activity in) the buffer zone during the 48-hour period, provided their total exposure time in any 24-hour period is 15 minutes or less. However, travel by unprotected workers or bystanders through the fumigated area itself is prohibited during the entire 5-day Entry Restricted period. Handlers protected with Personal Protective Equipment (PPE) required for early entry into a treated area may work in buffer zones.
4. Ensuring application site has a distinctive buffer zone. The buffer zone of the field to be treated cannot overlap the buffer zone of another field treated within the last 48 hours.
5. The Certified Applicator supervising the soil fumigation must document how the buffer zone was determined, the location of unoccupied sensitive sites within $\frac{1}{4}$ mile of the fumigated area, and how persons in occupied structures located within the buffer zone were protected. These records must be maintained by the Certified Applicator and by the owner/operator of the fumigated site for at least two years following the fumigation and must be made available, upon request to Federal, State, Tribal, and local enforcement personnel.

Determining Buffer Zone Distance

- Determine the size of the buffer zone using the following Buffer Zone Table.
- The size of the buffer zone will be dependant on the following three factors:
 - The number of field acres that are being treated with MIDAS 33:67.
 - The pounds of MIDAS 33:67 that are being applied per treated acre.
 - Buffer zone reduction credits

Buffer Zone Table

MIDAS 33:67 Application Rate (Lbs per Treated Acre) ⁴	SIZE OF FIELD IN ACRES (Buffer zone distance in feet) ^{1,2}							
	Up to 5 Acres	6 – 10 Acres	11-15 Acres	16- 20 Acres	21-25 Acres	26-30 Acres	31-35 Acres	36-40 ³ Acres
100	25	25	45	60	70	80	90	95
150	25	30	60	85	100	115	130	145
175	25	35	70	100	120	135	150	165
200	25	40	80	115	135	155	175	190
250	25	50	95	140	165	190	215	235
300	30	60	115	170	200	230	260	285
350	35	70	135	200	235	265	300	330
360	35	70	140	205	240	275	310	340
400	40	75	150	225	265	305	345	380
500	50	95	190	285	335	380	430	475
530	50	100	200	300	350	400	450	500

1. For rates not listed on this table, use the buffer zone for the next highest rate, or use the following calculation to determine the exact buffer zone:

$$\text{Buffer Zone for Application Rate Not Listed} = \frac{\text{Known Buffer Zone on Table} \times \text{Application Rate Not Listed}}{\text{Rate of Application for Known Buffer Zone}}$$

2. Buffer Zone Reduction Credits:

Reduce buffer zone by 10% for each factor listed below:

- Use of flat fume / broadcast application
- Use of High Barrier films. High Barrier films for which credit can be applied must be on an Arysta approved list. Examples of Arysta approved films are Canslit Brand Metalized 1.3 ml, Pliant Blockade® VIF 1.25 ml, or Pliant Metalized 1.0-1.25.
- Application to soils having >3% organic matter Refer to the USDA or USGS Soil Survey Maps for the treated area that identify the range of organic matter and / or a documented soil survey report that lists range of % organic matter for the treated area. Collection of samples for analysis of soil in the treated area should follow procedures as per USDA's Natural Resource Conservation Services methods. Information on soil sampling can be found at www.soil.usda.gov.
- Use of flat fume / broadcast application

For example, if the Buffer Zone is 50 feet and the application qualifies for a buffer zone reduction credit such as use of Metalized film, then the buffer zone can be reduced by 10%, i.e. reduced by 5 feet based on the following calculation: 50 ft – (50 ft X 10%) = 45 feet.

If the application qualifies for two buffer zone reduction credits such as use of high barrier film and soil with >3% organic matter, then the buffer zone can be reduced by 20%, i.e. reduced by 10 feet based on the following calculation: 50 ft – (50 ft X 20%) = 40 feet.

3. Applications are limited to 40 contiguous acres or less per day on a single site.
4. For raised bed applications, the treated area is the raised bed not the untreated furrows. As an example, if a raised bed field is 50% raised bed (treated) and 50% furrow (untreated), and 350 lbs of MIDAS 50:50 is applied to the field, then the effective application rate to the treated raised bed is 350 lbs per treated acre; and that is the rate that would determine the buffer zone.

Note: Minimum allowable buffer zone is 25 feet regardless of buffer zone reduction credits.

Buffer Zone for Pre-Plant Deep Injection Auger

- 25 feet if the application rate is less than 150 lbs MIDAS 33:67 per acre.
- 50 feet if application rate is 150 to 379 lbs MIDAS 33:67 per acre, and
- 100 feet if the application rate is 380 to 530 lbs MIDAS 33:67 per acre.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), restricted entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

Entry Restrictions

Entry into the treated area (including early entry that would otherwise be permitted under the WPS) by any person, other than a correctly trained and equipped handler who is performing a task that is permitted by this labeling, is PROHIBITED from the start of the application until 5 days after application and the air concentration of chloropicrin is measured to be less than 0.1 ppm. Early entry under the WPS is limited to tarp inspection and repair. Non-handler entry is prohibited while tarps are being removed. See the Buffer Zone section for additional Entry Restrictions.

Notification at Entrances to Treated Areas

Notify all workers of the fumigation verbally and by posting warning signs at all likely entrances to the treated area for no less than 5 days after application. The signs must bear the skull and crossbones symbol and state:

- (1) "DANGER/PELIGRO"
- (2) "Areas under fumigation, DO NOT ENTER/NO ENTRE"
- (3) Iodomethane and Chloropicrin Fumigants In Use
- (4) Date and time of fumigation
- (5) MIDAS 33:67
- (6) Name, address, and telephone number of the Certified Applicator in charge of the application.

Post these fumigant warning signs for treated areas instead of the WPS signs for these applications but follow all WPS requirements pertaining to location, legibility, size and timing of posting and removal.

PPE for Reentry during the Entry-Restricted Period

The PPE required for reentry during the entry-restricted period are:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- An air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C).

GENERAL INFORMATION AND INSTRUCTIONS

This fumigant is a highly hazardous material. All uses of this fumigant are covered under the Worker Protection Standard, and must be conducted in accordance with all of the requirements of the Worker Protection Standard (40 CFR Part 170). It is a restricted use pesticide that must only be used by or under the direct supervision of individuals trained and certified in its proper use. Before using, read the entire label and follow all use directions and precautions. All persons working with this fumigant must be knowledgeable about the hazards and trained in the use of required air-purifying respirator equipment and detector devices, emergency procedures and proper use of the fumigant.

GENERAL USE PRECAUTIONS

- Follow all local government instructions for posting of treated areas and post all treated areas with warning signs.
- Comply with all local ordinances and regulations.
- Do not apply within ¼ mile of any occupied sensitive site such as schools, day care facilities, nursing homes, hospitals, prisons, and playgrounds.
- Applications are limited to 40 contiguous acres or less per day on a single site. .
- Do not apply this product in the presence of ground fog, inversion layers or when the potential for an inversion layer is likely to occur as this may result in product drift outside the treated area. A smoke generator can be used to indicate the presence of an inversion layer if the smoke column does not rise in a vertical pattern. In addition, consult the local weather forecast in the surrounding region for reports of expected inversion layers the day of application and within the 24 hour period following applications of MIDAS 50:50.
- Never fumigate alone. A minimum of two trained employees must be present during handling and application of soil fumigants.
- Certified Applicators are responsible for providing information to all workers involved with the fumigation about precautions and procedures in the safe handling, worker protection and application of MIDAS 50:50 for soil fumigation.
- Additional instructions must be made available to workers in the mechanical operation of the tractor and how to safely work with the operator while fumigating.
- Always handle this product in the open, with all workers positioned "upwind" from the container and/or where there is adequate ventilation.
- Check the fumigation system for leaks or worn out equipment prior to soil injection.
- When fumigating from a tractor, it is required that 5 gallons of water be carried on the tractor and readily available for rinsing and cleaning purposes. An additional 5 gallons of water must be available in the service truck. This water must be potable and in containers marked "Decontamination water not to be used for drinking.
- For broadcast/flat fume applications, keep all pets, livestock and other domestic animals out of the treated areas until tarps have been removed.
- For raised bed applications, keep all pets, livestock and other domestic animals out of the treated areas for 5 days and/or until the air concentration for chloropicrin is less than 0.1 ppm at the edge of the treated area. Most raised bed applications will not result in tarp removal.
- Tarp removal requires a minimum of two trained employees to be present during the operation. Non-handler personnel are prohibited from being present during tarp removal.
- See AGRICULTURAL USE REQUIREMENTS box for details regarding posting and placement of warning signs.
- Do not allow entry by unprotected persons into the fumigated area until the re-entry signs are removed. Such signs must only be removed when the air concentration of chloropicrin is measured to be less than 0.1 ppm at the edge of the treated area and no sooner than 5 days following

application. Signs must remain legible during entire posting period. Also, do not cut tarps for planting until these conditions have been met.

- To determine whether aeration is complete, each fumigated site must be tested and shown to contain less than 0.1 ppm chloropicrin in the air space around the treated site as determined by 3 consecutive measurements taken at the down wind edge of the treated site at least 15 minutes apart.

SPILL AND LEAK PROCEDURES

- Cease all operations if any leak develops in the fumigation system.
- Evacuate everyone from the immediate areas of the spill or leak.
- Approach the area from the upwind side. Work upwind to repair leak(s), if possible.
- For entry into the area to correct the problem, trained personnel must wear loose fitting or well ventilated long-sleeved shirt and long pants, shoes plus socks and either (a) a supplied-air respirator (MSHA/NIOSH approval number prefix TC-19C) or (b) a self-contained breathing apparatus (SCBA)(MSHA/NIOSH approval number prefix TC-13F).
- Only correctly trained and PPE-equipped handlers are permitted to enter. Do not permit entry into the spill or leak area by any other person until the concentration of chloropicrin is measured to be less than 0.1 ppm as specified in section above.
- Allow spilled fumigant to evaporate or to absorb onto vermiculite, dry sand, earth, or similar absorbent material. Such material should be disposed of on site or at an approved disposal facility.
- Contaminated soil, water and other cleanup debris may be hazardous waste. Report any spill that exceeds 200 lbs (12.6 gallons of product) to the National Response Center at 1-800-424-8802.

PROCEDURES PRIOR TO, DURING AND AFTER ALL APPLICATIONS

CONTROL OF SOIL BORNE PESTS: MIDAS 33:67 controls soil-borne pests including nematodes, insects, weed seeds, and diseases.

Midas 33:67 will control the following pests when present in soil at the time of treatment:

Weed Seeds, including broadleaf weeds such as nutsedge, pigweed, broomrape and lambsquarters, and grasses such as bermudagrass, and annual bluegrass. Effectiveness against hard seed weeds, such as mallow, dodder, morning glory, and certain leguminous weeds may be variable.

Plant-parasitic Nematodes, such as root-knot, root lesion (meadow), cyst, citrus, burrowing, false root-knot, lance, spiral, ring, sting, stubby root, dagger, awl, sheath and stung (stylet) nematodes.

Soil-borne Insects, such as wireworms, cutworms, grubs, rootworms, ants and garden symphylans.

Soil-borne Diseases, such as *Verticillium*, *Pythium*, *Rhizoctonia*, *Phytophthora*, and *Fusarium*.

MIDAS 33:67 is not to be used as a preventative treatment for pests that may be introduced after the fumigant has been applied and/or tarps removed. To reduce the potential for the re-introduction of pests (nematodes, weed seed and disease); avoid the use of irrigation water, transplants or equipment that could carry pests into the planting area. Avoid moving infested soil back into the treated area through cultivation or other means.

Soil Preparation: The soil should be worked to the depth that is desirable for the fumigant to penetrate. Plant refuse should be worked into the soil and allowed enough time to decompose prior to treatment. Little or no plant refuse should be present on soil surface. Prior to application, the soil must be sufficiently moistened to allow seeds to swell (imbibe) in preparation for germination.

Prior to All Applications:

- Ensure that application equipment does not contain components made of natural rubber, aluminum, magnesium or their alloys.
- Soil in treatment area should be reasonably free of trash and in good tilth prior to soil treatment.
- Do not apply to wet or cold soils (<55°F at a depth of 8 inches).

During All Applications:

- Immediately cover treated areas with a plastic tarpaulin for a minimum of 5 days.
- Allow time for complete voiding of material in the buried shanks following closure of the shutoff valve and before removing shanks from the soil.
- In the event that trash is pulled up with the shanks after completing a treatment pass, the trash must be covered with plastic film and the edges of the film buried under at least 4 inches of compacted soil before making the next pass through the field.
- Do not change cylinders when the fumigant system is under pressure. Change cylinders with all cylinder valves in the off position.

Following All Applications:

- To minimize the potential for crop injury, allow the fumigant to dissipate before planting a crop. Seeds may be used as a bioassay to determine if MIDAS 33:67 is present in the soil at concentrations sufficient to cause plant injury. DO NOT PLANT if the odor of the chloropicrin is detectable. See fumigation tables for planting requirements specific to the different application methods.
- Fumigation of highly acidic soils or those high in organic matter can cause ammonia toxicity to plants and or elevated levels of soluble salts in the soil causing phytotoxicity. Analyze soil following fumigation and fertilize as indicated. Avoid those fertilizers using ammonium salts.

MIDAS 33:67 PRE-PLANT FIELD FUMIGATION METHODS

Fumigations with MIDAS 33:67 shall only be performed in accordance with the following three application techniques: 1) Raised Bed Application, 2) Broadcast/Flat Fume Application, or 3) Deep Injection Auger Probe Application (stone fruit, nut trees, vines, and field-grown ornamental trees and shrubs only). Application methods and rates of application for each of these methods are discussed in detail below

RAISED BED APPLICATION

- Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of no less than 6 inches below the soil surface. The treated ground must be sealed using either:
 - Closing shoes and compaction roller: The closing shoes shall cover the chisel marks with soil just ahead of the compaction roller, and the tarpaulin shall be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor; or
 - Bed shaper: The chisels shall be placed with the injection point under the bed shaper, and the tarpaulin shall be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor; or
 - Combination bed former and bed shaper: The chisels shall be placed between the bed former and the bed shaper. The tractor with the tarpaulin-laying equipment shall immediately follow the application tractor.
- Injection depth of between 6 and 15 inches. The injection depth in preformed beds must not be below the bed furrow.
- Injection spacing of 12 inches or less typically performed with a multiple shank applicator.
- Planting shall not occur for at least 10 days after application (refer to RAISED BED SOIL FUMIGATION TABLE below).

Application Rates for Raised Bed Fumigation: Rates in the table below are given in pounds of MIDAS 33:67 per broadcast acre. The amount of product applied will be proportionate to the row spacing and width of the raised bed. To calculate the amount of product to be applied, multiply the application rate in lbs MIDAS 33:67/broadcast acre by the appropriate modifier from the Field Rate Modifier Table provided below.

RAISED BED SOIL FUMIGATION TABLE		
Crop	MIDAS 33:67 Per Broadcast Acre ¹	Time Between Application and Planting
Field-Grown Ornamentals Peppers Strawberries Tomatoes	Standard Film 300 - 530 lbs/Broadcast Acre (19.9 – 35.1 gal/Broadcast Acre)	10 – 14 days ^{2, 3}
	Highly Retentive Film 175-250 lbs/Broadcast Acre 11.6 – 16.6 gal/Broadcast Acre	14 – 21 days when using highly retentive film ^{4, 5}

NOTE:

- ¹ For fields infested with Nutsedge and Malva, apply a minimum of 450 lbs/acre (29.8 gal/acre) of MIDAS 33:67.
- ² Use the longer planting restriction period under conditions of high soil moisture, heavy soils, or rain or persistence of chloropicrin odor in the soil.
- ³ If standard tarpaulins are NOT removed, planting can occur a minimum of 10 days after application, which includes the minimum 24 hours of aeration once the tarps have been cut. If tarpaulins are not cut or aerated prior to planting, the odor of chloropicrin must not be detectable. If odor of chloropicrin is detectable, wait a minimum of 14 days before planting to avoid possible plant injury.
- ⁴ Use of highly retentive films (e.g. VIF and approved Metallic) will require a rate reduction of up to 40-50% of the maximum use rate. Contact your Arysta LifeScience representative for film selection and rate reduction recommendations.
- ⁵ If highly retentive films are not removed, planting can occur a minimum of 14 days after application, which includes the minimum 24 hours of aeration once the tarps have been cut. If the tarpaulins are not cut or aerated, prior to planting, the odor of chloropicrin must not be detectable. If odor of chloropicrin is detectable, wait a minimum of 21 days before planting to avoid possible plant injury.

Field Rate Modifier Table for Raised Bed Applications

Row Spacing (inches)	Bed Width (inches)	Field Rate Modifier
72	40	0.55
72	36	0.50
72	32	0.44
72	30	0.42
72	28	0.39
66	32	0.48
66	30	0.45
66	28	0.42
66	24	0.36
60	30	0.50
60	28	0.47
48	28	0.58

BROADCAST / FLAT FUMIGATION

- Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of 6 to 15 inches below the soil surface.
 - Closing shoes and compaction roller: The treated ground must be sealed using closing shoes and compaction roller. The closing shoes shall cover the chisel marks with soil just ahead of the compaction roller, and the tarpaulin shall be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor.
- Planting shall not occur for at least 10 days after application (refer to BROADCAST / FLAT FUME APPLICATION TABLE).
- This product may be applied by broadcast/flat fume application with standard polyethylene films or highly retentive films, as they become available. Contact your Arysta LifeScience North America representative for information on film selection and rate reduction recommendations.

Application Rates for Broadcast or Flat Fumigation

BROADCAST / FLAT FUME APPLICATION TABLE		
Crop	MIDAS 33:67 Per Acre¹	Time Between Application and Planting
Field-Grown Ornamentals Peppers Strawberries Tomatoes Turf	300 – 530 lbs/Acre (19.9 – 35.1 gal/Acre)	10 – 14 days
Stone Fruits (Apricot, Sweet Cherry, Tart Cherry, Nectarine, Peach, Plum, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot, Fresh Prune) Tree Nuts (Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (Hazelnut), Hickory Nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Black Walnut, English Walnut) Vines (Table, Raisin and Wine Grape)	360- 530 lbs/Acre (23.8 – 35.1 gal/Acre)	10 – 14 days ²
Nurseries (including strawberries, stone fruits, tree nuts and conifer trees)	530 lbs/Acre (35.1 gal/Acre)	10 – 14 days ²
NOTE: ¹ For fields infested with Nutsedge and Malva apply a minimum of 300 lbs/acre (18.9 gal/acre) of MIDAS 33:67. ² If tarpaulins are removed, planting can occur 10 days after application, which includes the minimum 5-day treatment period before tarps are cut plus the minimum of 24 hours of aeration after tarps are cut and before they are removed. Use the longer planting restriction period under conditions of high soil moisture, heavy soils, or rain or persistence of chloropicrin odor in the soil.		

Tarpaulin Cutting and Removal for Broadcast / Flat Fume Applications: Following the completion of the application of MIDAS 33:67, the tarpaulin shall not be cut for a minimum of 5 days (120 hours) following completion of injection to the application block.

If the tarpaulin is removed from the field, removal shall begin no sooner than 24 hours after tarpaulin cutting has been completed (a task which cannot occur until a minimum of 5 days after application, as stated above).

PREPLANT DEEP INJECTION AUGER-PROBE APPLICATION

For Stone Fruits, Tree Nuts, Vines, and Field Grown Ornamental Trees and Shrubs, use 2 lbs of MIDAS 33:67 per injection site, typically to a depth of between 18 to 36 inches below the soil surface, though deeper injections may be made as appropriate. Use 1 injection site per 100 square feet (i.e., one injection site every 10 feet in a standard grid pattern). Planting or replanting of Stone Fruits, Tree Nuts, Vines, and Field-Grown Ornamentals may begin 14 days after treatment. DO NOT PLANT if the odor of chloropicrin is detectable.

Do not treat more than 230 trees/shrubs/vines per acre per day.

- 25 feet if the application rate is less than 150 lbs MIDAS 33:67 per acre.
- 50 feet if application rate is 150 to 379 lbs MIDAS 33:67 per acre, and
- 100 feet if the application rate is 380 to 530 lbs MIDAS 33:67 per acre.

FOOD CROP ROTATION RESTRICTIONS

Food crops other than strawberry, tomatoes and peppers require a 4 month plant back rotation restriction from the date of fumigant application. Crop rotation to non-food crops or non-bearing fruit or nut trees is not restricted.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store in a dry, cool, well-ventilated area under lock and key. When appropriate to prevent tipping, store cylinders upright, secured to a rack or wall. Post as a pesticide storage area.

Handling: Product cylinders shall not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging or sliding. Do not use rope slings, hooks, tongs, or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured.

Do not remove valve protection bonnet and safety cap until immediately before use. When cylinder is not in use, close valve by turning clockwise until hand tight, screw safety cap onto valve outlet, and replace protection bonnet.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Return of Containers: This pesticide container, whether full or partially used, is the property of the manufacturer or distributor where it was purchased and must be returned to the distributor of origin. Do not ship containers without safety caps or valve protection bonnets. Containers shall never be refilled by the consumer or used for any other product or purpose.

FOR 24-HOUR CHEMICAL EMERGENCY (spill, leak, fire or accident) ASSISTANCE:
Call CHEMTREC at 1-800-424-9300

Warranty and Disclaimer Statement

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America Corporation ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF ARYSTA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.**

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF ARYSTA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT ARYSTA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.

MIDAS® is a registered trademark of Arysta LifeScience North America Corporation



September 4, 2007

Ms. Mary Waller
Product Management Team (21)
Fungicide-Herbicide Branch (H7505C)
Registration Division
Office of Pesticide Programs
Document Processing Desk (APPL)
U.S. Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202

Subject: MIDAS@33:67
EPA File Symbol 66330-LO
Application for Pesticide Registration

Dear Ms. Waller,

Arysta LifeScience North America herewith submits the enclosed application for pesticide registration of MIDAS@33:67 (32.93% Iodomethane: 66.73% Chloropicrin) as an end use product in accordance with Section 3 of the Federal Insecticide, Fungicide and Rodenticide Act as amended. The enclosed registration application consists of one administrative volume which contains the following information:

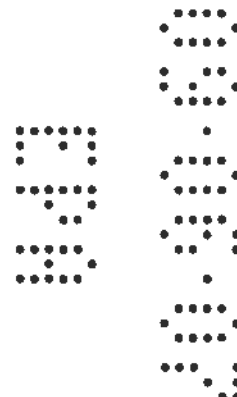
- Transmittal Letter
- Application Form for Pesticide Registration (8570-1)
- A Confidential Statement of Formula (CSF) (8570-4)
- Five paper copies of the proposed product label
- Certification With Respect to Data Citation (8570-34)
- A data matrix listing the studies being cited (8570-35).
- Formulator's Exemption Statement (8570-27)

The enclosed revised CSF is consistent with one submitted by Laurent Mezin on September 1, 2006. We are looking forward to working with you to complete this registration action. Should you have any questions concerning this matter, please feel free to contact me at the coordinates listed below:

Sincerely,

Abraham J. Tobia, PhD, MS
Regulatory Manager/Toxicology Manager
T: (919) 678-4886
F: (919) 678-2194
M: (919) 793-8889
<mailto:abe.tobia@arystalifescience.com>

cc : B. Rhodes
R. Tinsworth
M. Allan
B. Mileson (cover only)
A. Lawyer



Please read instructions on reverse before completing form.

Form Approved. OMB No. 2070-0080, Approval expires 2-28-



United States
Environmental Protection Agency
Washington, DC 20460

☒ Registration
☐ Amendment
☐ Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number Arysta LifeScience North America / 66330-LO	2. EPA Product Manager Mary Waller	3. Proposed Classification <input type="checkbox"/> None <input checked="" type="checkbox"/> Restricted
4. Company/Product (Name) Arysta LifeScience North America / Midas 33:67	PM# 21	
5. Name and Address of Applicant (Include ZIP Code) Arysta LifeScience North America Corporation 15401 Weston Parkway, Suite 150, Cary, NC 27513 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input type="checkbox"/> Notification - Explain below.	<input checked="" type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Modification of Label per discussions with EPA

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Text		<input checked="" type="checkbox"/> Metal	
* Certification must be submitted		If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt	No. per container
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 25, 110, 400 gals		5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input checked="" type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled		<input type="checkbox"/> Other _____			

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Abraham J. Tobia, Ph.D.	Title Manager Regulatory/ Toxicology Manager	Telephone No. (Include Area Code)
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title Manager Regulatory/ Toxicology Manager	
4. Typed Name Abraham J. Tobia, Ph.D.	5. Date August 29, 2007	

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PAPERWORK REDUCTION ACT NOTICE: Public reporting burden for this collection of information is estimated to average 0.85 hour per response, including time for reviewing instructions searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch, (21383), U.S. Environmental Protection Agency, 401 M Street SW, Washington, DC 20460.

INSTRUCTIONS: This form is to be used for applications for new registration, and use reregistration, amendment, resubmission, to applications for notifications, final printed labeling, reregistration, etc. In order to process an application for a new registration submitted on this form, the following material must accompany the application:

1. Certification with Respect to Citation of Data (EPA Form 8570-29). [If not exempted by 40 CFR 152.81 (b) (4)];
2. Confidential Statement of Formula (EPA Form 8570-4);
3. Formulator's Exemption Statement (EPA Form 8570-273);
4. Five copies of draft labeling;
5. Three copies of any data submitted;
6. Authorization letter where applicable;
7. Matrices where applicable.

Submission of Labeling - Labeling should first be submitted in the form of draft labels with all applications for new registration. Such draft labels may be in the form of typed label text on 8.5 x 11 inch paper for submission or a mockup of the proposed label. If prepared for mockup, it should be constructed in a way as to facilitate storage in an 8.5 x 14 inch file. Mockup labels significantly smaller than 8.6 x 11 inches should be mounted on 8.5 X 11 inch paper for submission.

Submission of Data - Data submitted in support of this application must be submitted in accordance with PR Notice 86-5.

Specific Instructions: Please read the instructions listed below before completing this application. First determine the type of registration section, listed in Block A, for which you are submitting this application. For applications submitted in connection with New Registration actions, Sections I, III, and IV must be completed by the applicant. For applications submitted in connection with amended reregistration actions, resubmissions, notifications, reregistrations, etc. Sections I, II, and IV must be completed by the applicant. Block A - Check the appropriate action for which you are submitting this form.

Section I - This section must be completed, as applicable, for all registration actions.

1. Company Product Number - Insert your Company Number, if one has been assigned by EPA. This number may have been assigned for you as a basic registrant, a distributor, or as an establishment. If your product is registered, insert the Product Number.
2. EPA Product Manager - If known, fill in the name and PM number of the EPA Product Manager.
3. Proposed Classification - Specify the proposed classification of this product.
4. Product Name - Enter the complete product name of this pesticide as it will appear on the label. The name must be specific to this product only. Duplication of names is not permitted among products of the same company. Do not include any brand name or company line designations.
5. Name and Address of Applicant - The name of the firm or person and address shown in your application is the person or firm to whom the registration will be issued. If you are acting in behalf of another party, you must submit authorization from that party to act for them in registration matters. An applicant not residing in the United States must have an authorized agent residing in the United States to act for them in all registration matters. The name and complete mailing address of such an agent must accompany this application.
6. Expedited Review - FIFRA section 3 (c) 3 (B) provides for expedited review of applications for registration, or amendments to existing registrations, that are similar or identical to other pesticide products that are currently registered with the EPA. In order for your application to be eligible for expedited review, you must provide us with the EPA Registration Number and product name of the product you believe is similar to or identical to your product. The product must be similar or identical in both formulation and labeled uses.

Section II - This section must be completed for all applications submitted to amend the registration only of a currently registered product (Amendment), for a resubmission for notifications to the Agency, for the submission of final printed labeling, for in response to an Agency letter, reregistration aid for any other action that pertains to a registered product. This section is not to be used for a new application for registration.

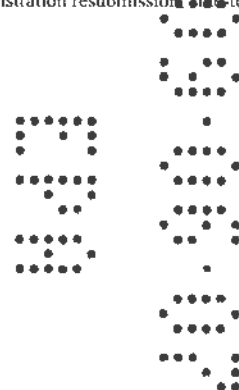
1. Subject of submission - Check the applicable block and provide the Agency letter date if appropriate. Provide a brief explanation of the purpose(s) for the submission, such as "the addition of a site, pest or crop (specify)"; "amend the Confidential Statement of Formula by..."; "reregistration submission"; "general label revision of use directions." Attach a separate page if additional space is needed.

Section III (Packaging and Container Information) - This Section must be completed for all applications submitted in connection with new registration or applicable amendments.

1. Type of Packaging - Check the appropriate block if your product will be packaged in the indicated packaging types. Indicate the size of the individual packets and number per retail container.
2. Types of Retail Container - Indicate type of container in which product will be marketed.
3. Location of Net Contents - Indicate the location of the net contents information for your product.
4. Size(s) of Retail Container - Specify the net contents of all retail containers for your product.
5. Location of Use Directions - Indicate the location of the use directions for your product.
6. Manner in which labels is affixed to product - Indicate the method product label is attached to retail container.

Section IV - Contact Point - This Section must be completed for all applications for Registration actions, i.e., new products registration resubmission, etc., reregistration, etc.

- 1-5. Self-explanatory.
6. EPA Use Only



**RESTRICTED USE PESTICIDE
DUE TO ACUTE TOXICITY**

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

MIDAS® 33:67

For Pre-Plant Fumigations of Fields Intended for Commercial Production of Listed Crops and Field-Grown Ornamentals, for the Control of Soil-Borne Pests Including Weed Seeds, Nematodes, Insects, and Diseases.

ACTIVE INGREDIENTS:

Iodomethane.....82.93%

Chloropicrin66.67%

OTHER INGREDIENTS:0.40%

TOTAL:.....100.00%

One gallon weighs 15.1 pounds (5.0 pounds Iodomethane and 10.1 pounds Chloropicrin).

**KEEP OUT OF REACH OF CHILDREN
DANGER / PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail).

FIRST AID

If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person.

HOT LINE NUMBERS

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE:

Call PROSAR at 1-866-303-6952

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage. Symptoms of overexposure may include irritation to eyes, skin, and respiratory system, shortness of breath, nausea, vomiting, dizziness, ataxia, slurred speech, drowsiness, blurred vision, staggering gait and mental imbalance, with probable recovery after period of no exposure. Treatment is symptomatic.

EPA Reg. No. 66330-
EPA Est. No.

For Product Information Call: 1-866-761-9397

Net Contents:

Arysta LifeScience North America Corporation
15401 Weston Parkway, Suite 150
Cary, NC 27513

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

Danger. Corrosive. Causes irreversible eye damage. Corrosive to skin. Causes skin burns. May be fatal if inhaled or swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin or on clothing. Do not breathe vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

CHLOROPICRIN WARNING: This product contains chloropicrin, a poisonous liquid or vapor. Inhalation of vapors may be fatal. Chloropicrin is readily identified by smell. Exposure to very low concentrations of vapor will cause irritation of eyes, nose and throat. Continued exposure after irritation is evident or higher concentrations may cause painful irritation to the eyes or temporary blindness. Liquid will cause chemical burns to skin or eyes. Do not get on skin, in eyes, or on clothing. Chloropicrin fumigant has the capacity to cause marked irritation to the upper respiratory tract and is a strong lachrymator (tear producing eye irritant). Low concentrations, below those necessary to cause serious systemic intoxication, are capable of causing severely painful eye irritation, hence will not be voluntarily tolerated. However, the effect may be so powerful that a person may become temporarily blinded and panic-stricken and that in turn may lead to accidents.

AIR CONCENTRATION LEVEL

Air concentrations of chloropicrin are measured with direct reading devices, such as Kitagawa tubes, certified for chloropicrin. Persons involved in the application of MIDAS® 33:67 or in reentry into treated fields must wear an air-purifying respirator when required by the restrictions given in the AGRICULTURAL USE REQUIREMENTS section below. In case of spills or leaks, additional respiratory protection must be worn as detailed under Spill and Leak Procedures.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- An air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C).
- When handling the product (e.g. the mixer/loader), full face shield or safety glasses with brow, temple and side protection is required. DO NOT wear goggles.
- Follow PPE manufacturer's instructions for cleaning / maintaining protective eyewear and respirators.

ENGINEERING CONTROL REQUIREMENTS

MIDAS 33:67 must be transferred through connecting hoses, pipes, and/or couplings sufficiently tight to prevent workers or other persons from coming in contact with the liquid.

- All hoses, piping, and tanks used in connection with this product shall be of a type appropriate for use under the pressure and vacuum conditions to be encountered.

- External sight gauges, if applicable, shall be equipped with valves so that pipes to sight gauge can be shut off in case of breakage or leakage.
- The mechanical transfer system must be adequate to make necessary measurements of the pesticide being used.
- Shut-off devices must be installed on the exit end of all cylinder connections and at all disconnect points to prevent leakage of product when the transfer is stopped and hose is removed or disconnected.
- The pressure in hoses used to move the product must not exceed the manufacturer's maximum pressure specifications.

User Safety Requirements

- Do not wear jewelry, gloves, goggles, tight clothing or any rubber protective clothing/boots that can trap iodomethane or chloropicrin vapors against your skin. Iodomethane and chloropicrin vapors can be trapped inside clothing and cause skin injury.
- Remove all clothing that comes in contact with liquid material at once.
- Aerate all affected clothing thoroughly prior to washing with hot water and detergent.
- Discard any clothing or absorbent materials (e.g. leather), that have been drenched or heavily contaminated with this product. Do not reuse them.

USER SAFETY RECOMMENDATIONS

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside, then wash skin thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat, open flames, or sparking electrical equipment. Do not use application devices containing natural rubber, aluminum, magnesium or their alloys.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only certified applicators and workers under their direct supervision trained in the proper handling, worker protection and application of MIDAS 33:67 soil fumigant may be present in the treatment area during application. Application tasks that require certification or to be performed under the direct supervision of a certified applicator include, but are not limited to the tractor driver, co-pilot, tarp dispenser and shoveler. All such personnel must have appropriate protective equipment, as described in the PERSONAL PROTECTIVE EQUIPMENT section. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), restricted entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

Entry Restrictions

Entry into the treated area (including early entry that would otherwise be permitted under the WPS) by any person, other than a correctly trained and equipped handler who is performing a task that is permitted by this labeling, is PROHIBITED from the start of the application until 48 hours after application and the air concentration of chloropicrin is measured to be less than 0.1 ppm. Non-handler entry is prohibited while tarps are being removed.

Entry Restrictions into the Fumigation Buffer Zones are defined in the Section "Prohibition of Entry into Fumigation Buffer Zones" below.

Notification at Entrances to Treated Areas and Fumigation Buffer Zones

Notify all workers of the fumigation verbally and by posting warning signs at all likely entrances to the treated area for no less than 48 hours. In addition, warning signs, if required, shall be posted at all likely entrances to the Fumigation Buffer Zone (see Prohibition of Entry into Fumigation Buffer Zones below) for the first ____ hours following application. The signs must bear the skull and crossbones symbol and state:

- (1) "DANGER/PELIGRO"
- (2) "Areas under fumigation, DO NOT ENTER/NO ENTRE"
- (3) Iodomethane and Chloropicrin Fumigants In Use
- (4) Date and time of fumigation
- (5) MIDAS 33:67
- (6) Name, address, and telephone number of the applicator.

Post these fumigant warning signs for treated areas instead of the WPS signs for these applications but follow all WPS requirements pertaining to location, legibility, size and timing of posting and removal.

Prohibition of Entry into Fumigation Buffer Zones

- The area adjacent to the treated area is referred to as the Fumigation Buffer Zone.
- The Fumigation Buffer Zone shall extend from the edge of the treated area in all directions, to a distance calculated per the directions below. The minimum Fumigation Buffer Zone distance shall be ____ feet from the edge of the treated area.
- Any activity which results in a person being present within the Fumigation Buffer Zone during the ____ hour period following application is prohibited unless the task is permitted under the WPS. Correctly trained handlers wearing appropriate PPE and performing a task that is permitted by this labeling may enter inside the Fumigation Buffer Zone.
- Examples of activities that are prohibited are work or recreation within a Fumigation Buffer Zone, or occupation of structures that are within a Buffer Zone during the period that the Fumigation Buffer Zone is in effect.
- Examples of activities that are not prohibited are driving past the treated field in an area that would otherwise be within the boundary of the Fumigation Buffer Zone.

Determining Distance for Fumigation Buffer Zone

- The size of the Fumigation Buffer Zone will be dependant on the following two factors:
 - The number of field acres that are being treated with MIDAS 33:67.
 - The pounds of MIDAS 33:67 that are being applied per field acre (referred to as the "field equivalent rate").
- The Fumigation Buffer Zone distance shall be determined as follows:
 - For raised bed applications, the "treated acreage" differs from the "field acreage" because only the rows are treated. As raised bed width and row spacing vary, the amount of product applied per field acre will also vary. Since Fumigation Buffer Zones must be determined from the application rate per *field acre*, it is necessary for raised bed applications to translate the application rate per *treated acre* into the application rate per *field acre*. To calculate the *field acreage* rate equivalent from the actual raised bed application rate, multiply the application rate (which is in lbs MIDAS 33:67/treated acre - see Raised Bed Soil Fumigant Table below) by the appropriate Raised Bed Field Rate Modifier from the following table.

Field Rate Modifier Table for Raised Bed Applications

Row Spacing (inches)	Bed Width (inches)	Field Rate Modifier
72	40	0.55
72	36	0.50
72	32	0.44
72	30	0.42
72	28	0.39
66	32	0.48
66	30	0.45
66	28	0.42
66	24	0.36
60	30	0.50
60	28	0.47
48	28	0.58

For example, the field acre-equivalent rate for application using 72 inch row spacing and 36 inch bed width for an application of 300 lbs MIDAS 33:67 per treated acre is 300 lbs product / Treated Acre x 0.50 = 150 lbs product /Field Acre.

- Determine the size of the Fumigation Buffer Zone using the following Fumigation Buffer Zone Table. The table inputs are the number of field acres treated and the application rate per field acre (using the application rate per field acre-equivalent for raised bed applications, as detailed above).

[INSERT FUMIGATION BUFFER ZONE TABLE HERE]
[INSERT PREVAILING WIND BUFFER ZONE GUIDANCE]

PPE for Reentry during the Entry-Restricted Period

Reentry within the treated area within the 48 hour restricted period is limited to inspection and repair of tarping material allowed by this labeling and or tasks permitted under the WPS. The PPE required for these tasks are:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- An air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C).

GENERAL INFORMATION AND INSTRUCTIONS

This fumigant is a highly hazardous material. It is a restricted use pesticide that must only be used by or under the direct supervision of individuals trained and certified in its proper use. Before using, read the entire label and follow all use directions and precautions. All persons working with this fumigant must be knowledgeable about the hazards and trained in the use of required air-purifying respirator equipment and detector devices, emergency procedures and proper use of the fumigant.

CONTROL OF SOIL BORNE PESTS: MIDAS 33:67 controls soil-borne pests including nematodes, insects, weed seeds, and diseases.

Midas 33:67 will control the following pests when present in soil at the time of treatment:

Weed Seeds, including broadleaf weeds such as nutsedge, pigweed, broomrape and lambsquarters, and grasses such as bermudagrass, and annual bluegrass. Effectiveness against hard seed weeds, such as mallow, dodder, morningglory, and certain leguminous weeds may be variable.

Plant-parasitic Nematodes, such as root-knot, root lesion (meadow), cyst, citrus, burrowing, false root-knot, lance, spiral, ring, sting, stubby root, dagger, awl, sheath and stung (stylet) nematodes.

Soil-borne Insects, such as wireworms, cutworms, grubs, rootworms, ants and garden symphylans.

Soil-borne Diseases, such as *Verticillium*, *Pythium*, *Rhizoctonia*, *Phytophthora*, and *Fusarium*.

MIDAS 33:67 is not to be used as a preventative treatment for pests that may be introduced after the fumigant has been applied and/or tarps removed. To reduce the potential for the re-introduction of pests (nematodes, weed seed and disease); avoid the use of irrigation water, transplants or equipment that could carry pests into the planting area. Avoid moving infested soil back into the treated area through cultivation or other means.

PROCEDURES AND SAFETY MEASURES PRIOR TO, DURING AND AFTER ALL APPLICATIONS

Soil Preparation: The soil should be worked to the depth that is desirable for the fumigant to penetrate. Plant refuse should be worked into the soil and allowed enough time to decompose prior to treatment. Little or no plant refuse should be present on soil surface. Prior to application, the soil must be sufficiently moistened to allow seeds to swell (imbibe) in preparation for germination.

Prior to All Applications:

- Follow all local government instructions for posting of treated areas and post all treated areas with warning signs:
 - The applicator (or supervisor of the application) must placard all likely entrances to the fumigated area with signs per Notification at Entrances to Treated Areas and Fumigation Buffer Zones (see Agricultural Use Requirements).
- Comply with all local ordinances and regulations.
- Do not apply this product in the presence of ground fog, inversion layers or when the potential for an inversion layer is likely to occur as this may result in product drift outside the treated area. A smoke generator can be used to indicate the presence of an inversion layer if the smoke column does not rise in a vertical pattern. In addition, consult the local weather forecast in the surrounding region for reports of expected inversion layers the day of application and within the 24 hour period following applications of MIDAS 33:67.

- Never fumigate alone. A minimum of two trained people must be present during handling and application of soil fumigants.
- Certified applicators are responsible for providing information to all workers under their supervision about precautions and procedures in the safe handling, worker protection and application of MIDAS 33:67 for soil fumigation.
- Additional instructions must be made available to workers in the mechanical operation of the tractor and how to safely work with the operator while fumigating.
- Always handle this product in the open, with all workers positioned "upwind" from the container and or where there is adequate ventilation.
- Check the fumigation system for leaks or worn out equipment prior to soil injection.
- When fumigating from a tractor, it is required that 5 gallons of water be carried on the tractor and readily available for rinsing and cleaning purposes. An additional 5 gallons of water must be available in the service truck. This water must be potable and in containers marked "Decontamination water not to be used for drinking."
- Soil in treatment area should be reasonably free of trash and in good tilth prior to soil treatment.
- Do not apply to wet or cold soils (<55°F at a depth of 8 inches).

During All Applications:

- Immediately cover treated areas with a plastic tarpaulin for a minimum of 5 days.
- Allow time for complete voiding of material in the buried shanks following closure of the shutoff valve and before removing shanks from the soil.
- In the event that trash is pulled up with the shanks after completing a treatment pass, the trash must be covered with plastic film and the edges of the film buried under at least 4 inches of compacted soil before making the next pass through the field.
- Do not change cylinders when the fumigant system is under pressure. Change cylinders with all cylinder valves in the off position.

Following All Applications:

- Keep all pets, livestock and other domestic animals out of the treated areas until after the end of fumigant period (typically 48 hours after application) and/or air concentration of chloropicrin is less than 0.1 ppm at the edge of the treated area. .
- After broadcast / flat fumigation treatment, if plastic tarps are removed a minimum of two trained people are required to be present during the operation.
- Do not allow entry by unprotected persons into the fumigated area until the signs are removed. Such signs must only be removed when the air concentration of chloropicrin is measured to be less than 0.1 ppm at the edge of the treated area and no sooner than 48 hours following application. Signs must remain legible during entire posting period. See AGRICULTURAL USE REQUIREMENTS box for details regarding posting and placement of warning signs.
- To determine whether aeration is complete, each fumigated site must be tested and shown to contain less than 0.1 ppm chloropicrin in the air space around the treated site.
- To minimize the potential for crop injury, allow the fumigant to dissipate before planting a crop. Seeds may be used as a bioassay to determine if MIDAS 33:67 is present in the soil at concentrations sufficient to cause plant injury. DO NOT PLANT if the odor of the chloropicrin is detectable. See fumigation tables for planting requirements specific to the different application methods.
- Fumigation of highly acidic soils or those high in organic matter can cause ammonia toxicity to plants and or elevated levels of soluble salts in the soil causing phytotoxicity. Analyze soil following fumigation and fertilize as indicated. Avoid those fertilizers using ammonium salts.

Spill and Leak Procedures:

- Cease all operations if any leak develops in the fumigation system.

- Evacuate everyone from the immediate areas of the spill or leak.
- Approach the area from the upwind side. Work upwind to repair leak(s), if possible.
- For entry into the area to correct the problem, trained personnel must wear loose fitting or well ventilated long-sleeved shirt and long pants, shoes plus socks and either (a) a supplied-air respirator (MSHA/NIOSH approval number prefix TC-19C) or (b) a self-contained breathing apparatus (SCBA)(MSHA/NIOSH approval number prefix TC-13F).
- Only correctly trained and PPE-equipped handlers are permitted to enter. Do not permit entry into the spill or leak area by any other person until the concentration of chloropicrin is measured to be less than 0.1 ppm.
- Allow spilled fumigant to evaporate or to absorb onto vermiculite, dry sand, earth, or similar absorbent material. Such material should be disposed of on site or at an approved disposal facility.
- Contaminated soil, water and other cleanup debris may be hazardous waste. Report any spill that exceeds 200 lbs (12.6 gallons of product) to the National Response Center at 1-800-424-8802.

MIDAS 33:67 PRE-PLANT FIELD FUMIGATION METHODS

Fumigations with MIDAS 33:67 shall be performed in accordance with the following three application techniques: 1) Raised Bed Application, 2) Broadcast/Flat Fume Application, or 3) Deep Injection Auger Probe Application (stone fruit, nut trees and vines only). Application methods and rates of application for each of these methods are discussed in detail below

RAISED BED APPLICATION

- Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of no less than 6 inches below the soil surface. The treated ground must be sealed using either:
 - Closing shoes and compaction roller: The closing shoes shall cover the chisel marks with soil just ahead of the compaction roller, and the tarpaulin shall be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor; or
 - Bed shaper: The chisels shall be placed with the injection point under the bed shaper, and the tarpaulin shall be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor; or
 - Combination bed former and bed shaper: The chisels shall be placed between the bed former and the bed shaper. The tractor with the tarpaulin-laying equipment shall immediately follow the application tractor.
- Injection depth of between 6 and 15 inches. The injection depth in preformed beds must not be below the bed furrow.
- Injection spacing of 12 inches or less typically performed with a multiple shank applicator.
- Planting shall not occur for at least 10 days after application (refer to RAISED BED SOIL FUMIGATION TABLE below).

Application Rates For Raised Bed Fumigation: Raised bed applications are made at a maximum rate of 530 lbs product per treated acre. The amount of product applied will be proportionate to the row spacing and width of the raised bed (refer to the RAISED BED FIELD RATE MODIFIER TABLE).

RAISED BED SOIL FUMIGATION TABLE		
Crop	MIDAS 33:67 Per Treated Acre ¹	Time Between Application and Planting
Field-Grown Ornamentals Peppers Strawberries	Standard Film 300 - 530 lbs/Treated Acre (19.9 – 35.1 gal/Treated Acre)	10 – 14 days ^{2,3}

Tomatoes	Highly Retentive Film 175-250 lbs/Treated Acre 11.6 – 16.6 gal/Treated Acre	14 – 21 days when using highly retentive film ^{4, 5}
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NOTE:

¹ For fields infested with Nutsedge and Malva, apply a minimum of 450 lbs/acre (29.8 gal/acre) of MIDAS 33:67..

² Use the longer planting restriction period under conditions of high soil moisture, heavy soils, or rain or persistence of chloropicrin odor in the soil.

³ If standard tarpaulins are NOT removed, planting can occur a minimum of 10 days after application, which includes the minimum 24 hours of aeration once the tarps have been cut. If tarpaulins are not cut or aerated prior to planting, the odor of chloropicrin must not be detectable. If odor of chloropicrin is detectable, wait a minimum of 14 days before planting to avoid possible plant injury.

⁴ Use of highly retentive films (e.g. VIF and approved Metallic) will require a rate reduction of up to 40-50% of the maximum use rate. Contact your Arysta LifeScience representative for film selection and rate reduction recommendations.

⁵ If highly retentive films are not removed, planting can occur a minimum of 14 days after application, which includes the minimum 24 hours of aeration once the tarps have been cut. If the tarpaulins are not cut or aerated, prior to planting, the odor of chloropicrin must not be detectable. If odor of chloropicrin is detectable, wait a minimum of 21 days before planting to avoid possible plant injury.

TARPAULIN / BROADCAST / FLAT FUMIGATION

- Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of 6 to 15 inches below the soil surface.
 - Closing shoes and compaction roller: The treated ground must be sealed using closing shoes and compaction roller. The closing shoes shall cover the chisel marks with soil just ahead of the compaction roller, and the tarpaulin shall be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor.
- Planting shall not occur for at least 10 days after application (refer to BROADCAST / FLAT FUME APPLICATION TABLE).
- This product may be applied by broadcast/flat fume application with standard polyethylene films or highly retentive films, should they become available. Contact your Arysta LifeScience North America representative for information on film selection and rate reduction recommendations.

Application Rates For Broadcast Or Flat Fumigation

BROADCAST / FLAT FUME APPLICATION TABLE		
Crop	MIDAS 33:67 Per Acre¹	Time Between Application and Planting
Field-Grown Ornamentals Peppers Strawberries Tomatoes Turf	300 – 530 lbs/Acre (19.9 – 35.1 gal/Acre)	10 – 14 days
Stone Fruits (Apricot, Sweet Cherry, Tart Cherry, Nectarine, Peach, Plum, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot, Fresh Prune) Tree Nuts (Almond, Beech nut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazelnut), Hickory nut, Macadamia nut (bush nut), Pecan, Black Walnut, English	360- 530 lbs/Acre (23.8 – 35.1 gal/Acre)	10 – 14 days ²

BROADCAST / FLAT FUME APPLICATION TABLE		
Crop	MIDAS 33:67 Per Acre ¹	Time Between Application and Planting
Walnut) Vines (Table, Raisin and Wine Grape)		
Nurseries (including strawberries, stone fruits, tree nuts and conifer trees)	530 lbs/Acre (35.1 gal/Acre)	10 – 14 days ²
NOTE: ¹ For fields infested with Nutsedge and Malva apply a minimum of 300 lbs/acre (18.9 gal/acre) of MIDAS 33:67. ² If tarpaulins are removed, planting can occur 10 days after application, which includes the minimum 5-day treatment period before tarps are cut plus the minimum of 24 hours of aeration after tarps are cut and before they are removed. Use the longer planting restriction period under conditions of high soil moisture, heavy soils, or rain or persistence of chloropicrin odor in the soil.		

Tarpaulin Cutting and Removal For Broadcast / Flat Fume Applications: Following the completion of the application of MIDAS 33:67, the tarpaulin shall not be cut for a minimum of 5 days (120 hours) following completion of injection to the application block.

If the tarpaulin is removed from the field, removal shall begin no sooner than 24 hours after tarpaulin cutting has been completed (a task which cannot occur until a minimum of 5 days after application, as stated above).

PREPLANT DEEP INJECTION AUGER-PROBE APPLICATION: For Stone Fruits, Tree Nuts and Vines, use 2 lbs of MIDAS 33:67 per injection site, typically to a depth of between 18 to 36 inches below the soil surface, though deeper injections may be made as appropriate. Use 1 injection site per 100 square feet (i.e., one injection site every 10 feet in a standard grid pattern). Planting or replanting of Stone Fruits, Tree Nuts and Vines may begin 14 days after treatment. **DO NOT PLANT** if the odor of chloropicrin is detectable.

FOOD CROP ROTATION RESTRICTIONS

Food crops other than strawberry, tomatoes and peppers require a 4 month plant back rotation restriction from the date of fumigant application. Crop rotation to non-food crops or non-bearing fruit or nut trees is not restricted.

STORAGE, HANDLING AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store in a dry, cool, well-ventilated area under lock and key. When appropriate to prevent tipping, store cylinders upright, secured to a rack or wall. Post as a pesticide storage area.

Handling: Product cylinders shall not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging or sliding. Do not use rope slings, hooks, tongs, or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured.

Do not remove valve protection bonnet and safety cap until immediately before use. When cylinder is not in use, close valve by turning clockwise until hand tight, screw safety cap onto valve outlet, and replace protection bonnet.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Return of Containers: This pesticide container, whether full or partially used, is the property of the manufacturer or distributor where it was purchased and must be returned to the distributor of origin. Do not ship containers without safety caps or valve protection bonnets. Containers shall never be refilled by the consumer or used for any other product or purpose.

FOR 24-HOUR CHEMICAL EMERGENCY (spill, leak, fire or accident) ASSISTANCE:
Call CHEMTREC at 1-800-424-9300

Warranty and Disclaimer Statement

1. The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America Corporation ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. All such risks shall be assumed by the user or buyer.
2. Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.
3. This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF ARYSTA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.**
4. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF ARYSTA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT ARYSTA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.**

MIDAS is a registered trademark of Arysta LifeScience North America Corporation



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
1200 Pennsylvania Avenue, N.W.
WASHINGTON, D.C. 20460

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 1.25 hours per response for registration and 0.25 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, Collection Strategies Division (2822T), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, N.W., Washington, DC 20460. Do not send the completed form to this address.

Certification with Respect to Citation of Data

Applicant's/Registrant's Name, Address, and Telephone Number Arysta LifeScience North America Corporation 15401 Weston Parkway, Suite 150, Cary, NC 27513	EPA Registration Number/File Symbol 66330-LO
Active Ingredient(s) and/or representative test compound(s) Iodomethane	Date 08/24/2007
General Use Pattern(s) (list all those claimed for this product using 40 CFR Part 158) Fumigant	Product Name Midas 33:67

NOTE: If your product is a 100% repackaging of another purchased EPA-registered product labeled for all the same uses on your label, you do not need to submit this form. You must submit the Formulator's Exemption Statement (EPA Form 8570-27).

☐ I am responding to a Data-Call-In Notice, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose).

SECTION I: METHOD OF DATA SUPPORT (Check one method only)

☒ I am using the cite-all method of support, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose)

☐ I am using the selective method of support (or cite-all option under the selective method), and have included with this form a completed list of data requirements (the Data Matrix form must be used).

SECTION II: GENERAL OFFER TO PAY

[Required if using the cite-all method or when using the cite-all option under the selective method to satisfy one or more data requirements]

☒ I hereby offer and agree to pay compensation, to other persons, with regard to the approval of this application, to the extent required by FIFRA.

SECTION III: CERTIFICATION

I certify that this application for registration, this form for reregistration, or this Data-Call-In response is supported by all data submitted or cited in the application for registration, the form for reregistration, or the Data-Call-In response. In addition, if the cite-all option or cite-all option under the selective method is indicated in Section I, this application is supported by all data in the Agency's files that (1) concern the properties or effects of this product or an identical or substantially similar product, or one or more of the ingredients in this product; and (2) is a type of data that would be required to be submitted under the data requirements in effect on the date of approval of this application if the application sought the initial registration of a product of identical or similar composition and uses.

I certify that for each exclusive use study cited in support of this registration or reregistration, that I am the original data submitter or that I have obtained the written permission of the original data submitter to cite that study.

I certify that for each study cited in support of this registration or reregistration that is not an exclusive use study, either: (a) I am the original data submitter; (b) I have obtained the permission of the original data submitter to use the study in support of this application; (c) all periods of eligibility for compensation have expired for the study; (d) the study is in the public literature; or (e) I have notified in writing the company that submitted the study and have offered (i) to pay compensation to the extent required by sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA; and (ii) to commence negotiations to determine the amount and terms of compensation, if any, to be paid for the use of the study.

I certify that in all instances where an offer of compensation is required, copies of all offers to pay compensation and evidence of their delivery in accordance with sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA are available and will be submitted to the Agency upon request. Should I fail to produce such evidence to the Agency upon request, I understand that the Agency may initiate action to deny, cancel or suspend the registration of my product in conformity with FIFRA.

I certify that the statements I have made on this form and all attachments to it are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

Signature 	Date 08/24/2007	Typed or Printed Name and Title Abraham Tobia - Regulatory & Toxicology Manager
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460

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DATA MATRIX

Date August 28, 2008	EPA Reg No./File Symbol 66330-LO	Page 1 of 3
Applicant's/Registrant's Name & Address Arysta LifeScience North America Corporation 15401 Weston Parkway, Suite 150, Cary, NC 27513	Product: Midas 33:67	

Ingredient: Iodomethane

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.0000	Product Chemistry	46476401	Arysta LifeScience North America	OWN	
830.1550	Product Identity and Composition	46476401	Arysta LifeScience North America	OWN	
830.1600	Description of Materials Used to Produce Product	46476401	Arysta LifeScience North America	OWN	
830.1650	Description of Formulation Process	46476401	Arysta LifeScience North America	OWN	
830.1670	Discussion of Formation of Impurities	46476401	Arysta LifeScience North America	OWN	
830.1700	Preliminary Analysis	46476401	Arysta LifeScience North America	OWN	
830.1750	Certified Limits	46476401	Arysta LifeScience North America	OWN	
830.1800	Enforcement of Analytical Method	46476401	Arysta LifeScience North America	OWN	
830.6302	Color	46476401	Arysta LifeScience North America	OWN	
830.6303	Physical State	46476401	Arysta LifeScience North America	OWN	
830.6304	Odor	46476401	Arysta LifeScience North America	OWN	
830.6314	Oxidation/Reduction: Chemical Compatibility	46476401	Arysta LifeScience North America	OWN	
830.6315	Flammability	46476401	Arysta LifeScience North America	OWN	
830.6316	Explosibility	46476401	Arysta LifeScience North America	OWN	
830.6317	Storage Stability	46476401	Arysta LifeScience North America	OWN	

Signature

663

Abraham A. Tobia

Name and Title: Abraham A. Tobia

Regulatory Manager/ Toxicology

Date: 8/28/2007

DATA MATRIX

Product: Midas 33:67

[illegible]

Date: 8/28/2007

401 M Street, S.W.
WASHINGTON, D.C. 20460

DATA MATRIX

Page 3 of 3

Product: Midas 33:67

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Date: 8/28/2007

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A 5x5 grid of dots. The dots are arranged to form the letters 'H' and 'E'. The 'H' is formed by dots at (1,1), (1,2), (1,3), (1,4), (1,5), (2,1), (2,2), (2,3), (2,4), (2,5), (3,1), (3,2), (3,3), (3,4), (3,5), (4,1), (4,2), (4,3), (4,4), (4,5), (5,1), (5,2), (5,3), (5,4), (5,5). The 'E' is formed by dots at (1,6), (1,7), (1,8), (1,9), (1,10), (2,6), (2,7), (2,8), (2,9), (2,10), (3,6), (3,7), (3,8), (3,9), (3,10), (4,6), (4,7), (4,8), (4,9), (4,10), (5,6), (5,7), (5,8), (5,9), (5,10).

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WASHINGTON, D.C. 20460

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Ingredient: Iodomethane					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
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			Arysta LifeScience North America	OWN	
Signature <i>Abraham A. Tobia</i>			Name and Title: Abraham Tobia Regulatory Manager/ Toxicology		Date: 8/28/2007

EPA Form 8570-35 (9-97) Electronic and Paper versions available.

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			Arysta LifeScience North America	OWN	
			Arysta LifeScience North America	OWN	
Signature			Name and Title: Abraham Tobia Regulatory Manager/ Toxicology		Date: 8/28/2007

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Date August 28, 2008	EPA Reg No./File Symbol 66330-LO	Page 3 of 3
Applicant's/Registrant's Name & Address Arysta LifeScience North America Corporation 15401 Weston Parkway, Suite 150, Cary, NC 27513	Product: Midas 33:67	

[illegible]

Abraham J. Tozia

Name and Title: Abraham Tobia
Regulatory Manager/ Toxicology

Date: 8/28/2007

EPA Form 8570-35 (9-97) Electronic and Paper versions available.

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2000-00-00


 United States Environmental Protection Agency
 Washington, D.C. 20460

Formulator's Exemption Statement
(40 CFR 152.85)

Applicant's Name and Address	EPA File Symbol/Registration Number 66330-LO	
	Product Name MIDAS@33:67	
	Date of Confidential Statement of Formula (EPA Form 8570-4) 8/30/07	

As an authorized representative of the applicant for registration of the product identified above, I here certify that:

(1) This product contains the following active ingredient(s): chloropicrin

(2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging of another product which contains that active ingredient, which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.

(3) Indicate by checking (A) or (B) below which paragraph applies:

☒ (A) An accurate Confidential Statement of Formula (EPA Form 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).

OR
☐ (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.

(4) The following active ingredients in this product qualify for the formulator's exemption.

Source		
Active Ingredient	Product Name	Registration Number
Chloropicrin		
Chloropicrin		
Chloropicrin		
Product ingredient source information may be entitled to confidential treatment		
Signature 	Name and Title Abraham J. Tobia - Regulatory Manager	Date August 31, 2007



Arysta LifeScience

June 25, 2007

Office of Pesticide Programs
Document Processing Desk (APPL)
U.S. Environmental Protection Agency
Room S-4900
One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202

Attn: Mary Waller, Product Manager 21
(703) 308-9354

Subject: Submission of Iodomethane Labels:

1. Midas[®] Technical (**EPA File # 66330-UU**) ✓
2. Midas[®] 98:2 (**EPA File # 66330-UG**) ✓
3. Midas[®] 50:50 (**EPA File # 66330-LT**) ✓
4. Midas[®] 33:67 (**EPA File # 66330-LO**) ✓
5. Midas[®] 25:75 (**EPA File # 66330-UE**) ✓
6. Midas[®] EC GOLD (**EPA File # 66330-AN**) ✓
7. Midas[®] EC BRONZE (**EPA File # 66330-LI**) ✓

Dear Ms. Waller,

Arysta LifeScience North America is formally submitting five copies each of the subject labels. These labels have been modified with the most recent label language which includes use and application rates. We have not included any information pertaining to buffer zones as we have not received the Agency's risk assessment incorporating Human Equivalent Concentrations which would allow us to perform these calculations. We look forward to receiving the draft risk assessment as soon as possible.

As a convenience, I will additionally send these labels in pdf format in an email to you.

If you should have any questions concerning this matter, please feel free to contact me at the coordinates listed here:

Abraham J. Tobia, PhD, MS
Regulatory Manager/Toxicology Manager
T: (919) 678-4886
F: (919) 678-2194
M: (919) 793-8889
<mailto:abe.tobia@arystalifescience.com>



Arysta LifeScience

Sincerely,

Abraham J. Tobia, PhD, MS
Regulatory Manager/Toxicology Manager

cc (cover only):

B. Rhodes
R. Tinsworth
M. Allan
B. Mileson
A. Lawyer

**RESTRICTED USE PESTICIDE
DUE TO ACUTE TOXICITY**

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

MIDAS® 33:67

For Pre-Plant Fumigations of Fields Intended for Commercial Production of Listed Crops and Field-Grown Ornamentals, for the Control of Soil-Borne Pests Including Weed Seeds, Nematodes, Insects, and Diseases.

ACTIVE INGREDIENTS:

Iodomethane	33.00%	•••
Chloropicrin	67.00%	•••
TOTAL:	100.00%	•••

One gallon weighs 15.1 pounds (5.0 pounds Iodomethane and 10.1 pounds Chloropicrin).

**KEEP OUT OF REACH OF CHILDREN
DANGER / PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail).

FIRST AID

If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person.

HOT LINE NUMBERS

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE:
Call PROSAR at 1-866-303-6952

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage. Symptoms of overexposure may include irritation to eyes, skin, and respiratory system, shortness of breath, nausea, vomiting, dizziness, ataxia, slurred speech, drowsiness, blurred vision, staggering gait and mental imbalance, with probable recovery after period of no exposure. Treatment is symptomatic.

EPA Reg. No. 66330-
EPA Est. No.

For Product Information Call: 1-866-761-9397

Net Contents:

Arysta LifeScience North America Corporation
15401 Weston Parkway, Suite 150
Cary, NC 27513

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

Danger. Corrosive. Causes irreversible eye damage. Corrosive to skin. Causes skin burns. May be fatal if inhaled or swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin or on clothing. Do not breathe vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

CHLOROPICRIN WARNING: This product contains chloropicrin, a poisonous liquid or vapor. Inhalation of vapors may be fatal. Chloropicrin is readily identified by smell. Exposure to very low concentrations of vapor will cause irritation of eyes, nose and throat. Continued exposure after irritation is evident or higher concentrations may cause painful irritation to the eyes or temporary blindness. Liquid will cause chemical burns to skin or eyes. Do not get on skin, in eyes, or on clothing. Chloropicrin fumigant has the capacity to cause marked irritation to the upper respiratory tract and is a strong lachrymator (tear producing eye irritant). Low concentrations, below those necessary to cause serious systemic intoxication, are capable of causing severely painful eye irritation, hence will not be voluntarily tolerated. However, the effect may be so powerful that a person may become temporarily blinded and panic-stricken and that in turn may lead to accidents.

AIR CONCENTRATION LEVEL

Air concentrations of chloropicrin are measured with direct reading devices, such as Kitagawa tubes, certified for chloropicrin. Persons involved in the application of MIDAS® 33:67 or in reentry into treated fields must wear an air-purifying respirator when required by the restrictions given in the AGRICULTURAL USE REQUIREMENTS section below. In case of spills or leaks, additional respiratory protection must be worn as detailed under Spill and Leak Procedures.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- An air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C).
- When handling the product (e.g. the mixer/loader), full face shield or safety glasses with brow, temple and side protection is required. DO NOT wear goggles.

ENGINEERING CONTROL REQUIREMENTS

MIDAS 33:67 must be transferred through connecting hoses, pipes, and/or couplings sufficiently tight to prevent workers or other persons from coming in contact with the liquid.

- All hoses, piping, and tanks used in connection with this product shall be of a type appropriate for use under the pressure and vacuum conditions to be encountered.

- External sight gauges shall be equipped with valves so that pipes to sight gauge can be shut off in case of breakage or leakage.
- The mechanical transfer system must be adequate to make necessary measurements of the pesticide being used.
- Shut-off devices must be installed on the exit end of all hoses and at all disconnect points to prevent leakage of product when the transfer is stopped and hose is removed or disconnected. A dry coupler that will minimize pesticide leakage must be installed at the disconnect point.
- The pressure in hoses used to move the product must not exceed the manufacturer's maximum pressure specifications.

User Safety Requirements

- Do not wear jewelry, gloves, goggles, tight clothing or any rubber protective clothing/boots that can trap iodomethane or chloropicrin vapors against your skin. Iodomethane and chloropicrin vapors can be trapped inside clothing and cause skin injury.
- Remove all clothing that comes in contact with liquid material at once.
- Aerate all affected clothing thoroughly prior to washing with hot water and detergent.
- Discard any clothing or absorbent materials (e.g. leather), that have been drenched or heavily contaminated with this product. Do not reuse them.

Follow PPE manufacturer's instructions for cleaning / maintaining protective eyewear and respirators.

USER SAFETY RECOMMENDATIONS

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside, then wash skin thoroughly and put on clean clothing. If clothing is drenched or heavily contaminated with this product, discard clothing or absorbent materials (e.g. leather). Do not reuse them.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat, open flames, or sparking electrical equipment. Do not use application devices containing natural rubber, aluminum, magnesium or their alloys.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only certified applicators and workers under their direct supervision trained in the proper handling, worker protection and application of MIDAS 33:67 soil fumigant may be present in the treatment area during application. Application tasks that require certification or to be performed under the direct supervision of a certified applicator include, but are not limited to the tractor driver, co-pilot, tarp dispenser and shoveler. All such personnel must have appropriate protective equipment, as described in the PERSONAL PROTECTIVE EQUIPMENT section. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), restricted entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

Entry Restrictions

Entry into the treated area (including early entry that would otherwise be permitted under the WPS) by any person, other than a correctly trained and equipped handler who is performing a task that is permitted by this labeling, is PROHIBITED from the start of the application until 48 hours after application and the air concentration of chloropicrin is measured to be less than 0.1 ppm. Non-handler entry is prohibited while tarps are being removed.

Notification at Entrances to Treated Areas

Notify all workers of the fumigation verbally and by posting warning signs at all likely entrances to treated areas. The signs must bear the skull and crossbones symbol and state:

- (1) "DANGER/PELIGRO"
- (2) "Areas under fumigation, DO NOT ENTER/NO ENTRE"
- (3) Iodomethane and Chloropicrin Fumigants In Use
- (4) Date and time of fumigation
- (5) Name of this product
- (6) Name, address, and telephone number of the applicator.

Post these fumigant warning signs instead of the WPS signs for these applications but follow all WPS requirements pertaining to location, legibility, size and timing of posting and removal. These fumigant warning signs shall be posted for no less than 48 hours after treatment.

PPE for Reentry during the Entry-Restricted Period

Reentry within the treated area within the 48 hour restricted period is limited to inspection and repair of tarping material allowed by this labeling and or tasks permitted under the WPS. The PPE required for these tasks are:

- Loose fitting or well ventilated long-sleeved shirt and long pants.
- Shoes plus socks.
- An air-purifying respirator with a 3M Brand No. 60928 cartridge filter, or equivalent (MSHA/NIOSH approved number prefix TC-23C).

GENERAL INFORMATION AND INSTRUCTIONS

This fumigant is a highly hazardous material. It is a restricted use pesticide that must only be used by or under the direct supervision of individuals trained and certified in its proper use. Before using, read the entire label and follow all use directions and precautions. All persons working with this fumigant must be knowledgeable about the hazards and trained in the use of required air-purifying respirator equipment and detector devices, emergency procedures and proper use of the fumigant.

SOIL BORNE PESTS CONTROLLED: MIDAS 33:67 controls soil-borne pests including nematodes, insects, weed seeds, and diseases such as those caused by *Phytophthora*, *Pythium*, *Fusarium*, *Verticillium* and *Rhizoctonia*. Soil fumigation using MIDAS 33:67 must be conducted according to directions and conditions of use described in this label. Application of this product will control only those pests present in the soil at time of soil treatment. It is not to be used as a preventative treatment for pests that may be introduced after the fumigant has been applied and/or tarps removed. To reduce the potential for the re-introduction of pests (nematodes, weed seed and disease); avoid the use of irrigation water, transplants or equipment that could carry pests into the planting area. Avoid moving infested soil back into the treated area through cultivation or other means.

SOIL PREPARATION: Prior to the application of soil fumigants, the ground must be sufficiently moist to allow seeds to swell (imbibe) in preparation for germination. The soil should be worked to the depth that is desirable for the fumigant to penetrate. Plant refuse should be worked into the soil and allowed enough time to decompose prior to treatment with soil fumigants.

FIELD FUMIGATION: Apply MIDAS 33:67 by shank fumigation. Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of no less than 6 inches below the soil surface. The treated ground must be sealed, utilizing a mechanical tarp layer, with a gas-tight plastic tarpaulin immediately following the chisel, as detailed below under MIDAS 33:67 PRE-PLANT FIELD FUMIGATION METHODS. Tarps must remain on the soil for at least 5 days prior to cutting and removal.

PRECAUTIONS FOR USAGE PRIOR TO, DURING AND AFTER SOIL FUMIGATION

Fumigation of highly acid soils or those high in organic matter can cause ammonia toxicity to plants and or elevated levels of soluble salts in the soil. Fertilize as indicated from soil analysis following fumigation and avoid those fertilizers using ammonium salts.

Prior to Fumigation:

- Follow all local government instructions for posting of treated areas and post all treated areas with warning signs:
 - The applicator (or supervisor of the application) must placard all likely entrances to the fumigated area with signs bearing the following:
 - Skull and crossbones symbol
 - "DANGER/PELIGRO"
 - "Area under fumigation. DO NOT ENTER/NO ENTREE."
 - "Iodomethane and Chloropicrin Fumigants in Use."
 - The date and time of fumigation
 - Name of this product
 - The name, address, and telephone number of the applicator.
- Comply with all local ordinances and regulations.
- Do not apply this product in the presence of ground fog, inversion layers or when the potential for an inversion layer is likely to occur as this may result in product drift outside the treated area. A smoke generator can be used to indicate the presence of an inversion layer if the smoke column does not rise in a vertical pattern. In addition, consider consulting the local weather forecast in the surrounding region for reports of expected inversion layers during application and within the 24 hour period following applications of MIDAS 33:67.
- Never fumigate alone. A minimum of two trained people must be present during handling and application of soil fumigants.
- Certified applicators are responsible for providing all other workers information about precautions and procedures in the safe handling, worker protection and application of MIDAS 33:67 for soil fumigation. Application tasks include, but are not limited to the tractor driver, co-pilot, tarp dispenser and shoveler.
- Additional instructions must be made available to workers in the mechanical operation of the tractor and how to safely work with the operator while fumigating.
- Always handle this product in the open, with all workers positioned "upwind" from the container and or where there is adequate ventilation.
- Check the fumigation system for leaks or worn out equipment prior to soil injection.
- When fumigating from a tractor, it is required that 5 gallons of water be carried on the tractor and readily available for rinsing and cleaning purposes. An additional 5 gallons of water must be available in the service truck. This water must be potable and in containers marked "Decontamination water not to be used for drinking."
- Soil preparation of the treatment area should be reasonably free of trash and in good tilth prior to soil treatment.

- Do not apply to wet or cold soils (<55°F at a depth of 8 inches).

During Fumigation:

- Immediately cover treated areas with a plastic tarpaulin for a minimum of 5 days.
- Allow time for complete voiding of material in the buried shanks following closure of the shutoff valve and before removing shanks from the soil.
- In the event that trash is pulled up with the shanks after completing a treatment pass, the trash must be covered with plastic film and the edges of the film buried under at least 4 inches of compacted soil before making the next pass through the field.
- Do not change cylinders when the fumigant system is under pressure. Change cylinders with all cylinder valves in the off position.

Following Fumigation:

- Keep all pets, livestock and other domestic animals out of the treated areas until after the end of fumigant treatment period (typically 48 hours after application).
- Remove the plastic tarps with a minimum of two trained people present during the operation.
- Do not allow entry by unprotected persons into the fumigated area until the signs are removed. Such signs must only be removed when the air concentration of chloropicrin is measured to be less than 0.1 ppm at the edge of the treated area and no sooner than 48 hours following application. Signs must remain legible during entire posting period.
- To determine whether aeration is complete, each fumigated site must be tested and shown to contain less than 0.1 ppm chloropicrin in the air space around the treated site.

Spill and Leak Procedures:

- Cease all operations if any leak develops in the fumigation system.
- Evacuate everyone from the immediate areas of the spill or leak.
- Approach the area from the upwind side. Work upwind, if possible.
- For entry into the area to correct the problem, trained personnel must wear loose fitting or well ventilated long-sleeved shirt and long pants, shoes plus socks and either (a) a supplied-air respirator (MSHA/NIOSH approval number prefix TS-19C) or (b) a self-contained breathing apparatus (SCBA)(MSHA/NIOSH approval number prefix TC-13F).
- Only correctly trained and PPE-equipment handlers are permitted to enter. Do not permit entry into the spill or leak area by any other person until the concentration of chloropicrin is measured to be less than 0.1 ppm.
- Allow spilled fumigant to evaporate or to absorb onto vermiculite, dry sand, earth, or similar absorbent material. Such material should be disposed of on site or at an approved disposal facility.
- Contaminated soil, water and other cleanup debris may be hazardous waste. Report any spill that exceeds 200 lbs (12.6 gallons of product) to the National Response Center at 1-800-424-8802.

MIDAS 33:67 PRE-PLANT FIELD FUMIGATION METHODS:

Fumigations with MIDAS 33:67 shall be performed in accordance with the following application techniques.

TARPAULIN / BEDDED / RAISED BED APPLICATION

- Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of no less than 6 inches below the soil surface. The treated ground must be sealed using either:
 - Closing shoes and compaction roller: The closing shoes shall cover the chisel marks with soil just ahead of the compaction roller, and the tarpaulin shall be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor; or
 - Bed shaper: The chisels shall be placed with the injection point under the bed shaper, and the tarpaulin shall be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor; or

- Combination bed former and bed shaper: The chisels shall be placed between the bed former and the bed shaper. The tractor with the tarpaulin-laying equipment shall immediately follow the application tractor.
- Injection depth of between 6 and 15 inches. The injection depth in preformed beds must not be below the bed furrow.
- Injection spacing of 12 inches or less typically performed with a multiple shank applicator.
- Planting shall not occur for at least 10 days after application (refer to PLANTING INTERVAL FOR ALL APPLICATIONS).

APPLICATION RATES BY BED SHANK / RAISED BED FUMIGATION

Row or bed applications are made at a maximum rate of 530 lbs product per treated acre but the amount will be proportionately less per acre depending upon the row spacing and width of treatment in the row or bed (refer to the FIELD RATE MODIFIER TABLE).

BEDDED PRE-PLANT SOIL FUMIGATION TABLE		
Crop	MIDAS 33:67 Per Treated Acre ¹	Time Between Application and Planting ²
Field-Grown Ornamentals Peppers Strawberries Tomatoes	Standard Film 300 - 530 lbs/Treated Acre (19.9 – 35.1 gal/Treated Acre)	10 – 14 days
	Highly Retentive Film The rates may be reduced when used in combination with high retentive plastics. Consult your Arysta LifeScience representative for rates and plastic recommendations.	
NOTE: ¹ For raised bed, the amount of product applied will be proportionately less per acre depending upon the row spacing and width of treatment in the row or bed. Use higher rates for Nutsedge and Malva control. It is recommended that a minimum of 450 lbs/acre (29.8 gal/acre) of MIDAS 33:67 be applied. ² Use the longer planting restriction periods under conditions of high soil moisture, heavy soils, or rain.		

DISTANCE CALCULATION OF FIELD RATES FOR BEDDED / RAISED BED APPLICATIONS

- In bedded applications, the treated acreage differs from the field acreage because only the rows are treated. As row width and spacing will vary, a "field-equivalent" rate range is possible. For broadcast applications, "field acre", "treated acre" and "real estate acre" are equivalent terms.
- To calculate the field rate equivalent to the actual raised bed application rate, multiply the treated rate by the appropriate Field Rate Modifier from the table below:

FIELD RATE MODIFIER TABLE

Row Spacing (inches)	Bed Width (inches)	Field Rate Modifier
72	40	0.55
72	36	0.50
72	32	0.44
72	30	0.42
72	28	0.39
66	32	0.48

Row Spacing (inches)	Bed Width (inches)	Field Rate Modifier
66	30	0.45
66	28	0.42
66	24	0.36
60	30	0.50
60	28	0.47
48	28	0.58

For example, the field-equivalent rate for application using 72 inch row spacing and 36 inch bed width is 300 lbs product /Acre x 0.50 = 150 lbs product /Acre.

TARPAULIN / BROADCAST / FLAT FUMIGATION

- Use tractor mounted chisels spaced no more than 12 inches apart and at a depth of 6 to 15 inches below the soil surface.
 - Closing shoes and compaction roller: The treated ground must be sealed using closing shoes and compaction roller. The closing shoes shall cover the chisel marks with soil just ahead of the compaction roller, and the tarpaulin shall be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor.
- Planting shall not occur for at least 10 days after application (refer to PLANTING INTERVAL FOR ALL APPLICATIONS).

TARPAULIN CUTTING AND REMOVAL FOR BROADCAST / FLAT FUME APPLICATIONS

- Following the completion of the application of MIDAS 33:67, the tarpaulin shall not be cut for a minimum of 5 days (120 hours) following completion of injection to the application block.
- If the tarpaulin is removed from the field, removal shall begin no sooner than 24 hours after tarpaulin cutting has been completed.

APPLICATION RATES BY BROADCAST OR FLAT FUMIGATION

Refer to the AGRICULTURAL USE REQUIREMENTS box for additional restrictions as they may apply.

BROADCAST PRE-PLANT SOIL FUMIGATION TABLE		
Crop	MIDAS 33:67 Per Acre ¹	Time Between Application and Planting ²
Field-Grown Ornamentals Peppers Strawberries Tomatoes Turf	300 – 530 lbs/Acre (19.9 – 35.1 gal/Acre)	10 – 14 days
Stone Fruits (Apricot, Sweet Cherry, Tart Cherry, Nectarine, Peach, Plum, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot, Fresh Prune) Tree Nuts (Almond, Beech nut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazelnut), Hickory nut, Macadamia nut (bush nut), Pecan, Black Walnut, English Walnut)	360- 530 lbs/Acre (23.8 – 35.1 gal/Acre)	10 – 14 days
Nurseries (including strawberries, stone fruits, tree nuts and conifer trees)	530 lbs/Acre (35.1 gal/Acre)	10 – 14 days

BROADCAST PRE-PLANT SOIL FUMIGATION TABLE		
Crop	MIDAS 33:67 Per Acre ¹	Time Between Application and Planting ²
<p>NOTE:</p> <p>¹ Use higher rates for Nutsedge and Malva control. It is recommended that a minimum of 450 lbs/acre (29.8 gal/acre) of MIDAS 33:67 be applied.</p> <p>² If odors of fumigant persist beyond the two-week period you may disc, plow or chisel the soil to help aeration in a flat fume (broadcast) fumigation operation. An air-purifying respirator shall be worn during these activities if the airborne concentration of chloropicrin is determined to be 0.1 ppm or greater when measured with a direct reading device such as a Kitagawa tube.</p> <p>Use the longer planting restriction periods under conditions of high soil moisture, heavy soils, or rain.</p>		

PREPLANT DEEP INJECTION AUGER-PROBE TREATMENT: For Stone Fruits and Tree Nuts, use 2 lbs of MIDAS 33:67 per injection site, typically to a depth of between 18 to 36 inches below the soil surface, though deeper injections may be made as appropriate. Use 1 injection site per 100 square feet (i.e., one injection site every 10 feet in a standard grid pattern). Planting or replanting of Stone Fruits and Tree Nuts may begin 14 days after the period of exposure. DO NOT PLANT if the odor of chloropicrin used in MIDAS 33:67 is detectable.

CROP ROTATION RESTRICTIONS

Crops other than strawberry, tomatoes and peppers require a 4 month plant back rotation restriction from the date of fumigant application. Strawberries, tomatoes and peppers can be planted into treated soil as soon as crop safety can be assured and no sooner than 10 days after treatment.

PLANTING INTERVAL FOR ALL APPLICATIONS

- Do not plant for at least 10 days after application of the fumigant to avoid any potential of crop injury. A longer period before planting may be necessary if the soil is wet or cold.
- If tarpaulins are removed, planting can occur 10 days after application, including a minimum of 5 days prior to tarp cutting plus a minimum of 24 hours of aeration after the tarpaulins have been cut.
- If tarpaulins are not to be removed before planting, then planting shall not occur before either:
 - At least 12 days after application, including at least 24 hours after holes have been cut in the tarpaulin to allow for aeration; or
 - At least 14 days after application. In this case, tarpaulins do not need to be cut or aerated prior to planting. However, if this option is chosen, the chloropicrin air concentration below the tarpaulin must be less than 0.1 ppm before planting begins to avoid possible plant injury.
- To minimize the potential for crop injury, allow the fumigant to dissipate completely before planting a crop. Seeds may be used as a bioassay to determine if MIDAS 33:67 is present in the soil at concentrations sufficient to cause plant injury. DO NOT PLANT if the odor of the chloropicrin used in MIDAS 33:67 is detectable.

STORAGE, HANDLING AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store in a dry, cool, well-ventilated area under lock and key. When appropriate to prevent tipping, store cylinders upright, secured to a rack or wall. Post as a pesticide storage area.

Handling: Product cylinders should not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging or sliding. Do not use rope slings, hooks, tongs, or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured.

Do not remove valve protection bonnet and safety cap until immediately before use. When cylinder is not in use, close valve by turning clockwise until hand tight, screw safety cap onto valve outlet, and replace

protection bonnet.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Return of Containers: This pesticide container, whether full or partially used, is the property of the manufacturer or distributor where it was purchased and must be returned to the distributor of origin. Do not ship containers without safety caps or valve protection bonnets. Containers should never be refilled by the consumer or used for any other product or purpose.

FOR 24-HOUR CHEMICAL EMERGENCY (spill, leak, fire or accident) ASSISTANCE:
Call CHEMTREC at 1-800-424-9300

Warranty and Disclaimer Statement

1. The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America Corporation ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. All such risks shall be assumed by the user or buyer.
2. Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.
3. This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF ARYSTA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.**
4. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF ARYSTA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT ARYSTA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.**

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